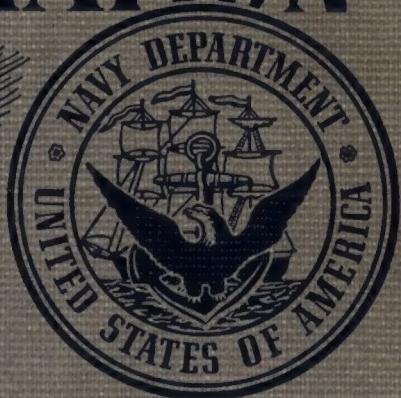


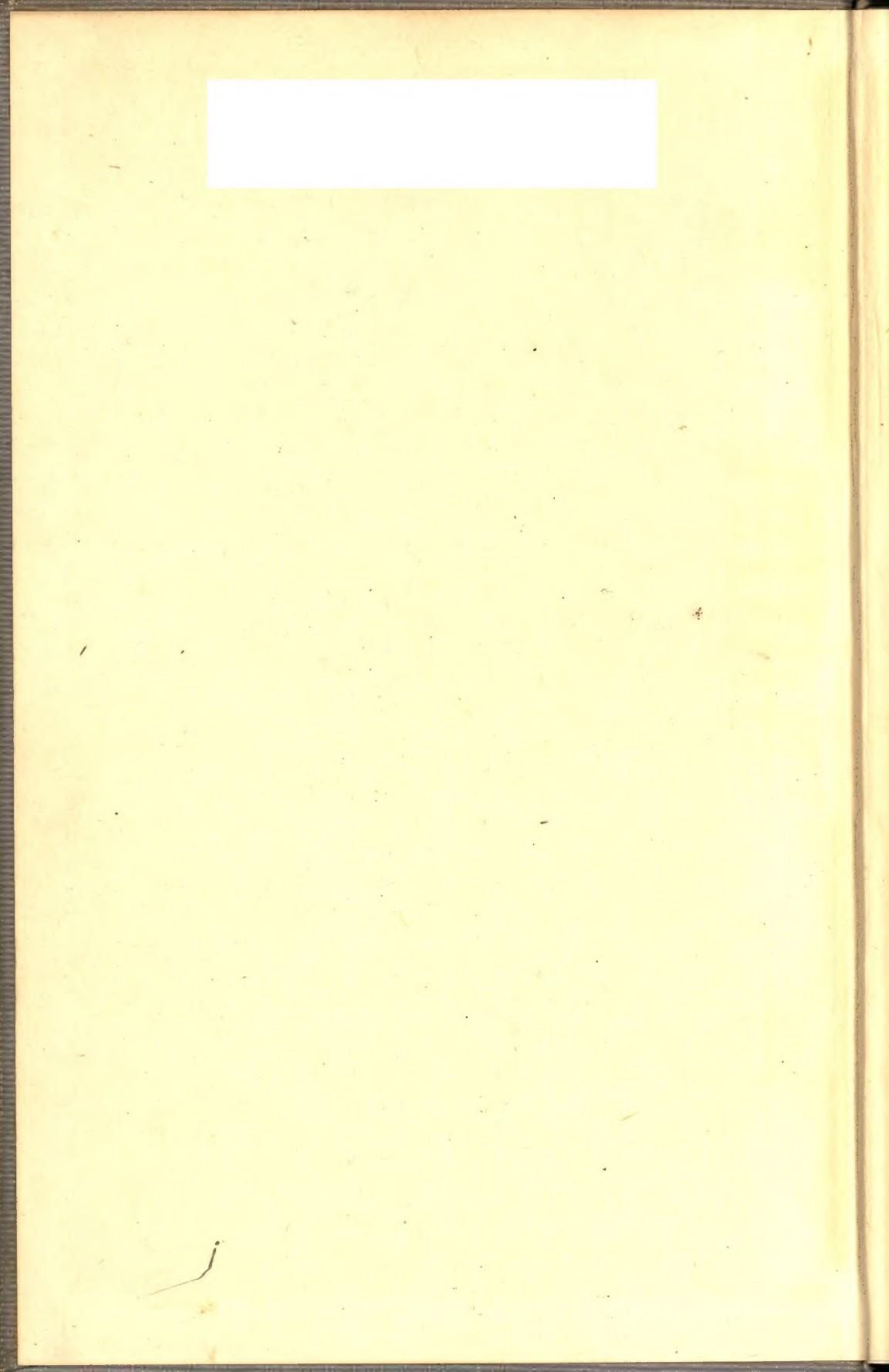
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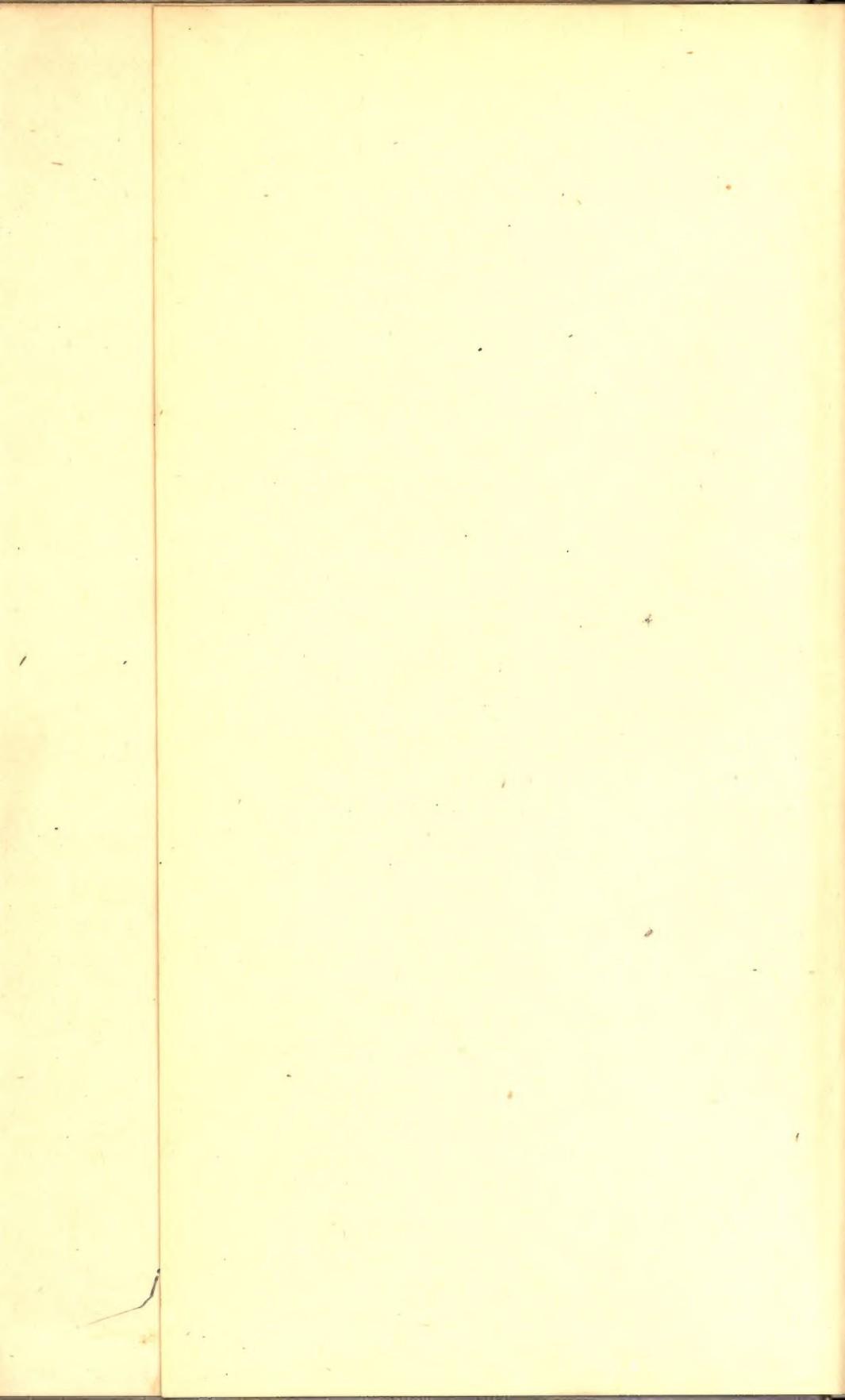
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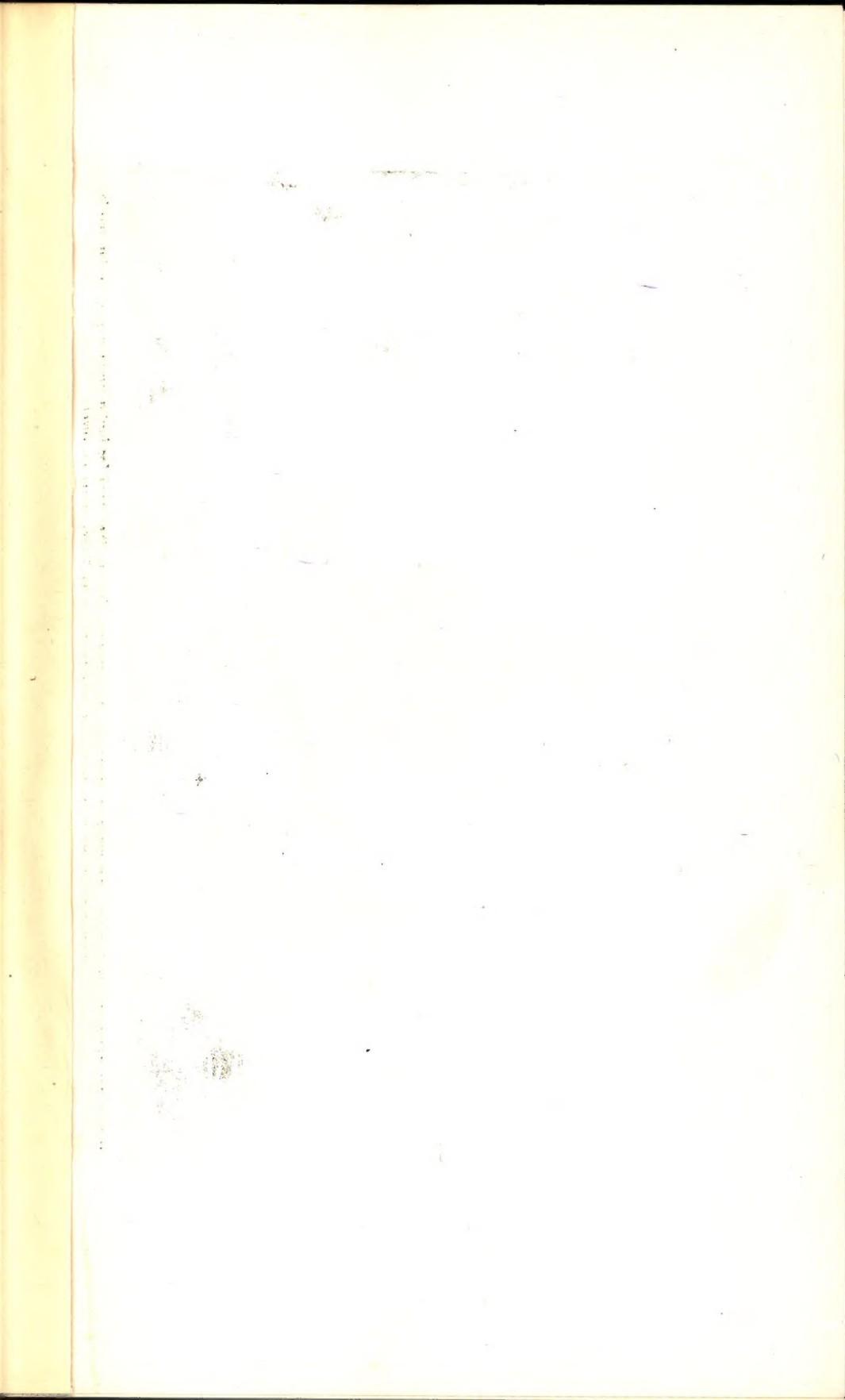
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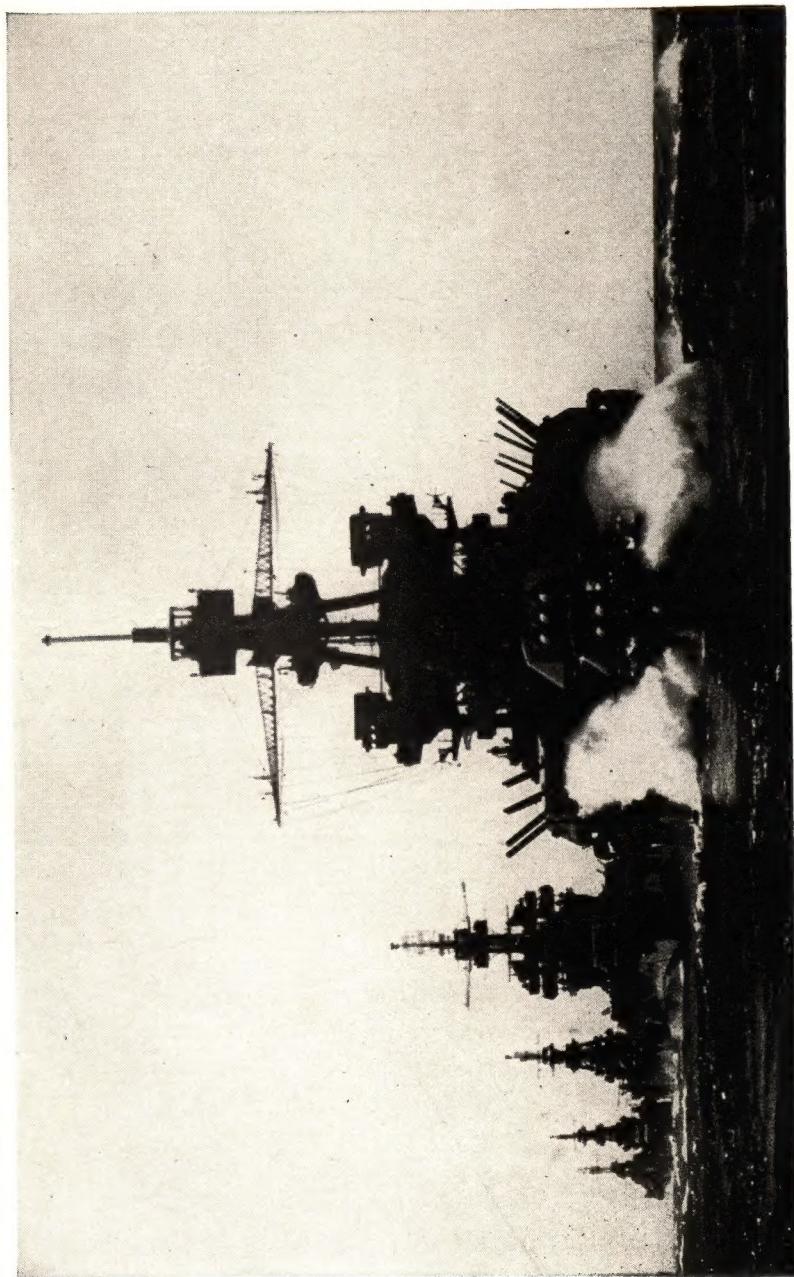


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Mighty battleships of the Seventh Fleet move in formation into Lingayen Gulf as they head for battle stations prior to the terrific bombardment which preceded the landing of United States forces on Luzon.

NAVAL ORIENTATION

JUNE 1945

**Prepared by
STANDARDS AND CURRICULUM DIVISION
TRAINING
BUREAU OF NAVAL PERSONNEL**

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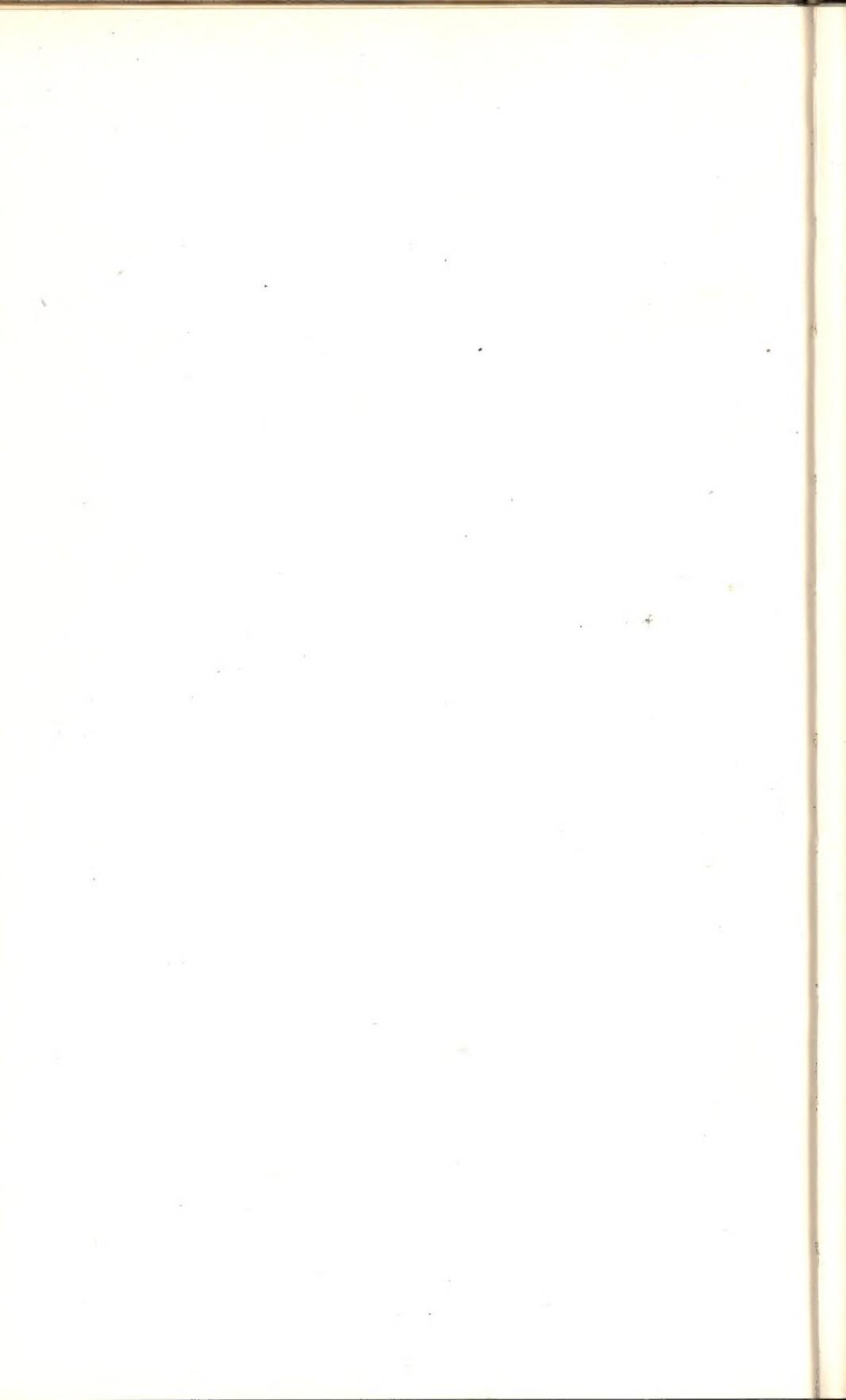
FOREWORD

This manual, which is a complete revision of an earlier volume bearing the same title, has been prepared primarily as a textbook for Naval Reserve Officers' Training Corps Units. It is believed, however, that it will prove useful to training officers ashore and afloat, to officer instructors in various training activities, to those in the various naval indoctrination schools, and to the individual officer who has been unable to take advantage of a formal indoctrination training.

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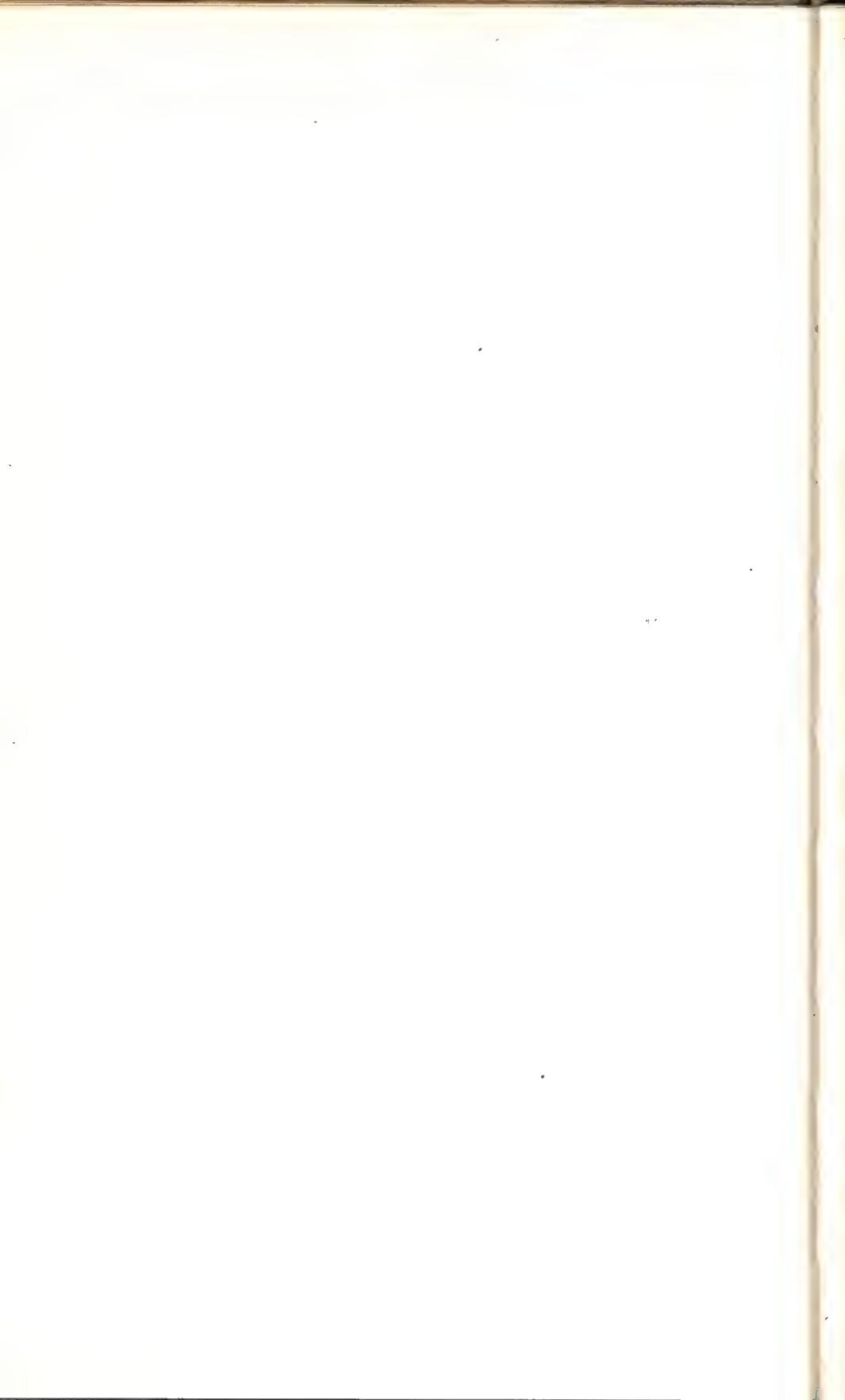
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1

NAVAL COURTESY AND CUSTOMS—PART I

A. INTRODUCTION

1A1. General. A naval officer should possess certain basic qualifications. These qualities, defined by John Paul Jones in 1775 in a letter to Congress, still prevail and it is difficult to improve upon his statement. He said, "It is by no means enough that an officer of the Navy should be a capable mariner. He must be that, of course, but also a great deal more. He should be as well a gentleman of liberal education, refined manners, punctilious courtesy, and the nicest sense of personal honor." It is the purpose of this and the following chapter to introduce most of the main aspects of military courtesy and etiquette, both as to the traditional elements which still survive and those which have changed under conditions of time or war. Customs, such as making formal social calls and leaving visiting cards, are more or less in abeyance during wartime, and are therefore not included.

B. THE SALUTE

1B1. Background and meaning. One of the main aspects of military courtesy is the salute. The regulations governing its use are founded on military etiquette and, as such, are deeply rooted in the tradition and customs of the naval service. Their observance, therefore, forms an important factor in the maintenance of discipline. It must be understood that these evidences of respect and courtesy are observed equally by all officers and men in the service, and that the junior is always the one to take the initiative. The salute from the newest apprentice seaman must be returned, no matter how high in rank the other may be. Respect and courtesy work both ways. Both the Army and the Navy emphasize that the salute is not rendered to the man but to the uniform he wears and the authority he represents.

It is plausible to place the origin of the salute in the days of chivalry. At that time, it was customary for knights in mail to raise their visors to friends for the purpose of identification. Because of strict gradations of rank, the junior was required to make the first gesture. The original personal *military* salute consisted of uncovering. The hand salute in the American Navy, like so many customs of our service, came to us by way of the British Navy. It is a precise and businesslike salutation. It is the efficient military way of saying "Good morning," "Good afternoon," etc.

There is nothing servile in the interchange. The salute is the democratic sign

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of comradeship among military men. A military organization functions efficiently only as a unit, and any aid which helps to bind the personnel, to give them a common bond and an identifying symbol, is a unifying influence to be nurtured in the best interest of the service. That is why everyone salutes. The fact that it is a simple and obvious gesture has made it a symbol that assumes a great importance. The words of General John J. Pershing, the Commanding General of the A.E.F. in World War I, indicate the importance of saluting in the minds of fighting men. "Send me men who can shoot and salute," he demanded.

1B2. Proper manner of saluting. Except when walking one should always be at attention when saluting. The right hand is raised smartly until the tip of the forefinger touches the lower part of the headgear or forehead above and slightly to the right of the right eye. Thumb and fingers are extended and joined. The palm is turned slightly inward until you can just see its surface from the corner of your right eye. The upper arm is parallel to the ground, the elbow slightly in front of the body. The forearm is inclined at a 45-degree angle and the hand and wrist are in a straightline.

It is important that the head and eyes are turned toward the person saluted. One completes the salute (after it is returned) by dropping the arm to its normal position in one sharp, clean motion, at the same time turning the head and eyes to the front.

The first position of the hand salute is executed when six paces from the person saluted, or at the nearest point of approach, if more than six paces. (Thirty paces is generally regarded as maximum saluting distance.) The first position should be held until the person saluted has passed or the salute is returned.

Naval custom permits saluting with the left hand when a salute cannot be rendered with the right hand. (Army custom holds to the use of the right hand.)

Certain common errors in saluting should be avoided. The major faults to watch are these:

Bowing the head as the salute is given.

Dropping the salute before it has been returned.

Casual, perfunctory, or sloppy salute.

Holding the arm awkwardly high or letting it sag too low.

Saluting on the double.

Avoiding the gaze of the person saluted.

Saluting with pipe, cigar, or cigarette in the mouth or in the hand.

Waiting too long to begin the salute.

1B3. Whom to salute. In the Navy, as in practically every military service in the world, everybody salutes—from the bottom to the top and down again. Enlisted men salute all officers and every officer salutes his seniors. Salutes are required to be returned by all who are saluted. (No one in the naval service salutes when uncovered.)



Figure 1.

Salutes are extended to officers of the Navy, Army, Marine Corps, and Coast Guard; to foreign military and naval officers whose governments are formally recognized by the government of the United States; and, when in uniform, to officers of the Naval, Army, Marine Corps, and Coast Guard Reserve, and of the National Guard.

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When several officers in company are saluted, all return the salute. For example, if an ensign were walking down the street with a commander and an Army captain approached, it would be improper for the ensign to salute the captain until the captain first saluted the commander. As the commander returns the salute, his companion, the ensign, salutes simultaneously. If there were two or more persons of various ranks in the group with the senior officer, they would render the salute when the senior officer returned the salute accorded him.

All civilians who are entitled, by reason of their position, to gun salutes or other honors, are also entitled by custom to the salute.

Regulations covering saluting apply also to officer and enlisted women reservists, and are the same as those governing other members of the Navy. The only exception is found in the case of women personnel who wear their caps and hats in certain public places (such as the theater or church) where men uncover; in these instances, women are technically "uncovered" and do not salute.

1B4. When to salute. There are many situations when salutes are required. A number of these are listed below, grouped under various headings, in order to simplify the presentation of the material.

1. *Aboard ship.* All officers and enlisted men on board a ship of the Navy salute all flag officers (officers above the rank of captain), captains of ships, and officers senior to themselves from other ships on every occasion of meeting, passing near, or being addressed.

They salute all officers senior to themselves attached to the same ship on their first daily meeting, and upon addressing or being addressed by their seniors. They salute the executive or other senior officer when that officer is making an official inspection. At other times when the progress of a senior officer may be impaired, officers and men clear a gangway and stand at attention facing the senior officer until he has passed.

2. *In boats.* Men seated in boats in which there is no officer, petty officer, or acting petty officer in charge, lying at landings, gangways or booms, rise and salute all officers passing near. When an officer, petty officer, or acting petty officer is in charge of a boat, he alone renders the salute.

Officers seated in boats rise in rendering and returning salutes when a senior enters or leaves the boat, or when acknowledging a gun salute.

Coxswains in charge of boats rise, unless by so doing the safety of the boat is imperiled, and salute when officers enter or leave their boats. In fact, coxswains always rise when extending a salute to commissioned officers, unless safety is endangered by so doing.

Boatkeepers and all other men in boats not underway and not carrying an officer, stand and salute when an officer comes alongside, leaves the side, or passes near them. If boat awnings are spread, they sit at attention and salute with the hand, but without rising.

3. *In buildings ashore.* In Navy buildings ashore, the same general rules of saluting apply as on board the Navy's ships at sea: Salute the Captain and all officers senior to him on all occasions; salute other officers on first daily meeting.

4. In civilian clothes. In peacetime, seniors should be saluted (when recognized) while wearing civilian clothing; in wartime, officers wearing civilian clothing are doing so, generally, because of an official reason for not disclosing their naval identity. Therefore, one should be discriminate about following the peacetime rule.



Figure 2.

5. *In a group.* If enlisted men or officers are standing together and a senior officer approaches, the first to perceive him says "Attention!" and all face the officer and salute.

6. *Women.* When covered, officers and men escorting women, or meeting officers and men escorting women, render the customary salute; if seated with women, juniors rise and salute. It is customary to salute a woman acquaintance when meeting upon the street. If remaining to talk with her, it is naval custom not to uncover. When departing from a woman's company, it is proper to salute again. (Strictly speaking, officers and men do not uncover in the open except for divine worship, and other religious ceremonies. Officers normally remain covered and salute at funerals. If in civilian clothes, they uncover. For details see Section 1B7.)

7. *Overtaking.* No junior should overhaul and pass a senior without permission. When for any reason it becomes necessary for the junior to pass, he does so to the left, salutes when abreast of the senior, and asks, "By your leave, Sir?"

8. *Reporting.* When reporting on deck or out-of-doors ashore, one is covered and salutes accordingly. When reporting in an office, he uncovers upon approaching the senior, and therefore does not salute.

9. *Seated.* An enlisted man being seated and without particular occupation rises upon the approach of an officer, faces toward him and salutes, if covered. If both remain in the same general vicinity, the compliments need not be repeated.

10. *Seniority unknown.* In most cases officers will know the relative seniority of those with whom they are in frequent contact, but there are many situations, especially ashore, where that is an obvious impossibility. Perhaps the safest advice is, at such times, to salute mutually and without delay. As a matter of fact, in practically every case where uncertainty exists, regardless of grade, the only rule to follow is to render the salute.

11. *Sentries.* Sentries at gangways salute all officers going or coming over the side, and when passing or being passed by officers close aboard in boats, or otherwise.

12. *Vehicles.* Enlisted men and officers salute all senior officers riding in vehicles, while those in the vehicle both render and return salutes, as may be required. As the driver of a vehicle, one is obliged to salute if the vehicle is at a halt; to do so while the vehicle is in motion might endanger the safety of the occupants and so it may be omitted.

1B5. When not to salute. There are some situations in which it is improper to salute. These are as follows:

When uncovered. (Army personnel do, however.)

In ranks. (When addressed, come to attention only.)

On work detail. (Man in charge of detail, however, salutes.)

When engaged in athletics or assembled for recreation or entertainment.

When carrying articles with both hands, or otherwise so occupied as to make saluting impracticable.

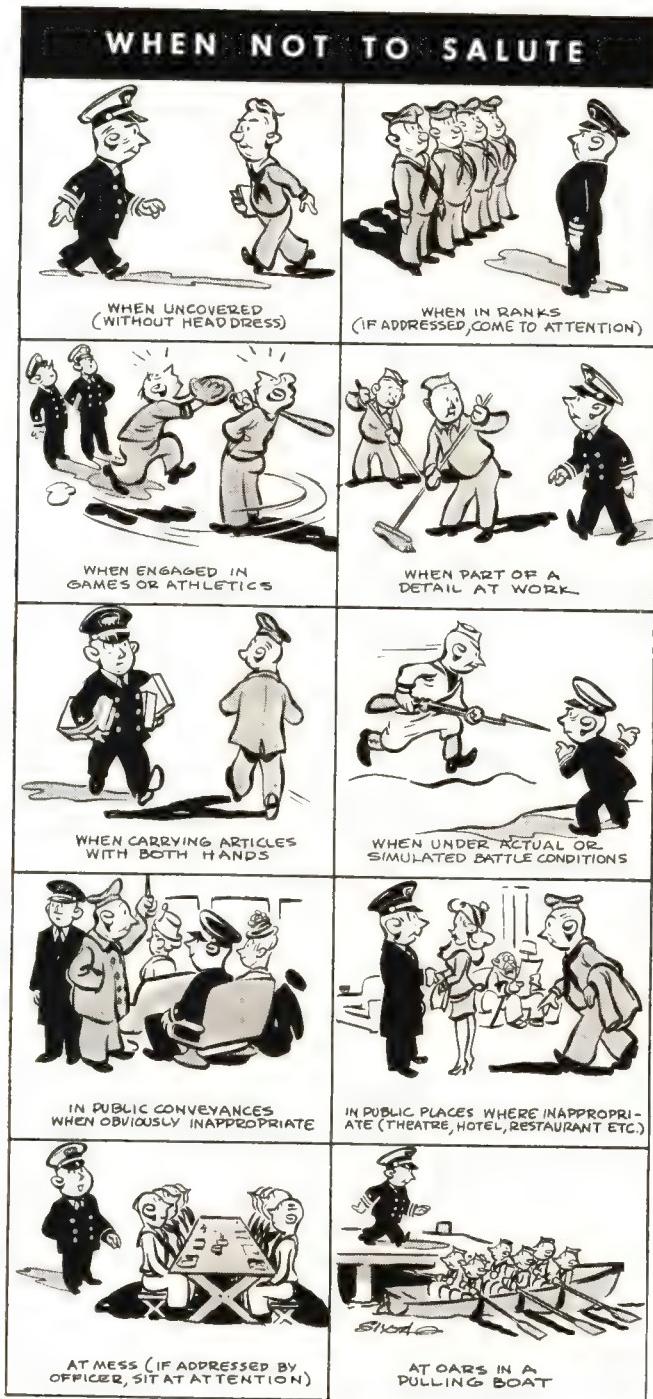


Figure 3.

In public places where obviously inappropriate (as theaters, restaurants, etc.
In public conveyances.

When a member of the guard engaged in performance of a duty which
prevents saluting.

In action or under simulated combat conditions.

At oars in a pulling boat.

At mess. (When addressed, correct procedure is to sit at attention.)

1B6. Salute accompanied with a greeting. The hand salute, under naval custom, is accompanied by a word of greeting. The junior holds himself erect, looks the senior straight in the eye and addresses him, depending upon the time of day, as follows:

From first rising until noon—"Good morning, . . . "

From noon until sunset—"Good afternoon, . . . "

From sunset until turning in—"Good evening, . . . "

It is preferable to call the senior by his title and name, i. e., "Commander Jones"; "Mr. Smith" (if rank is below commander); "Chaplain Wilson" etc., rather than by the impersonal "Sir."

The use of a word of greeting to accompany the salute is a Navy custom, although some Army personnel also follow it.

1B7. The hand salute on other occasions. In addition to the salute rendered to persons, naval personnel also salute the national ensign, the national anthem, and the quarter-deck.

1. *National ensign.* All officers and enlisted men, when reaching the quarter-deck either from a boat, from the shore, or from another part of the ship, salute the national ensign. In the event the ensign is not hoisted this salute is tendered only when leaving or coming on board ship.

In making this salute, which is entirely distinct from the salute to the officer of the deck, the person making it stops at the top of the gangway, or upon arriving at the quarter-deck, faces the colors and renders the salute, after which he also salutes the officer of the deck. In leaving the quarter-deck, the same salutes are rendered in reverse order. The officer of the deck returns both salutes, and it is his duty to require that they be properly made.

The Commanding Officer clearly defines the limits of the quarter-deck to embrace as much of the main or other appropriate deck as may be necessary for the proper conduct of official and ceremonial functions. When the quarter-deck so designated is forward and at a considerable distance from the colors, the salute to the colors is not rendered by officers and men except when leaving or coming on board the ship.

2. *National anthem.* Whenever the national anthem is played, all officers and enlisted personnel of the Navy:

(a) Stand at attention facing the music unless at colors when they face the ensign.

(b) If in uniform, covered, they salute at the first note of the anthem, retaining the position of salute until the last note of the anthem.

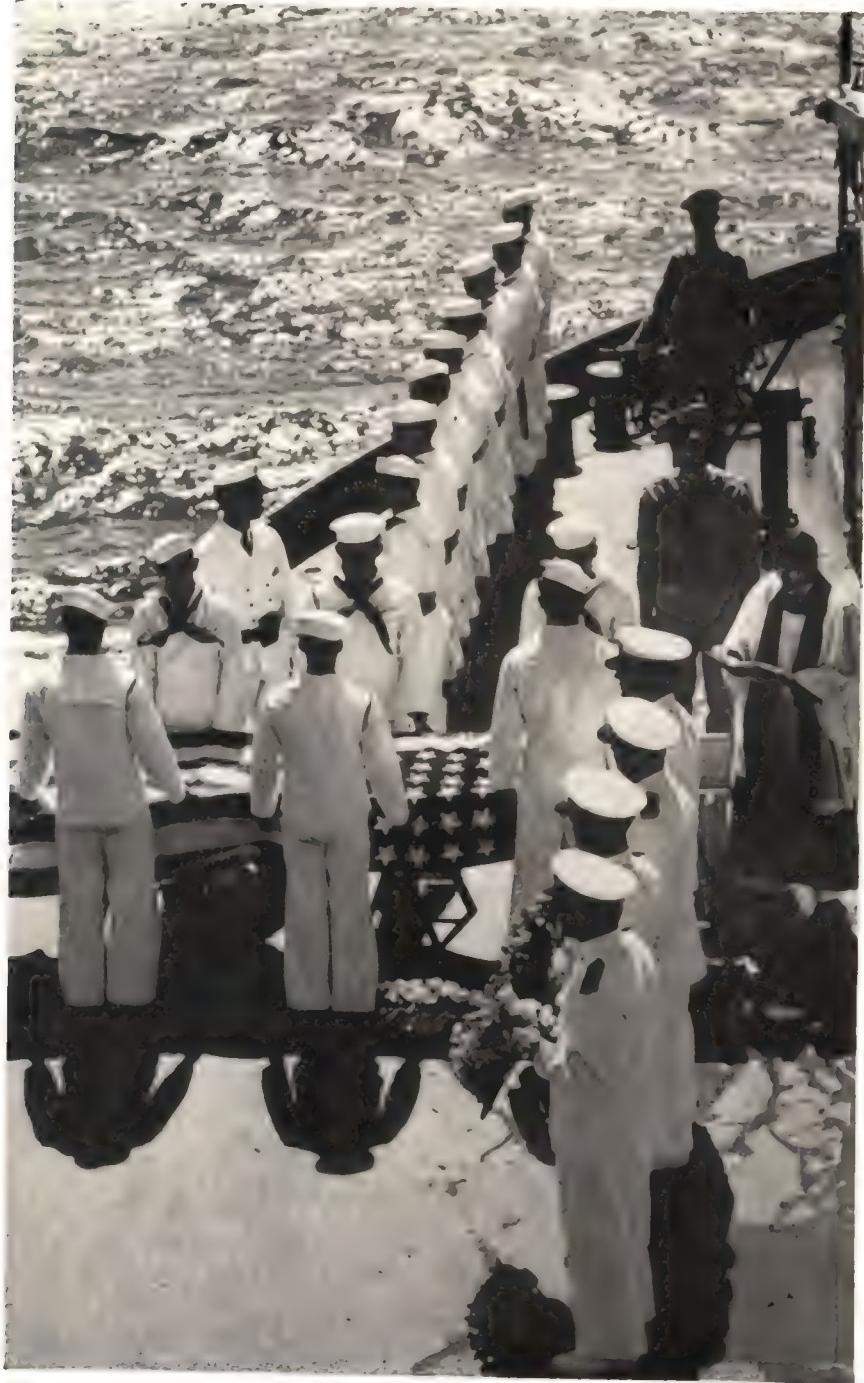


Figure 4. Burial at sea. A naval officer goes to his final resting place.

(c) If not in uniform, they uncover at the first note of the anthem, holding the headdress over the heart and so remain until the last note. In the instance of inclement weather the headdress may be raised slightly and held above the head.

The above rules have been interpreted to apply only to a formal rendition of the national anthem. For example, if a man in uniform were walking past a radio store and heard "The Star-Spangled Banner" being broadcast, he would not be expected to stop, face the music, and salute. On the other hand, at a public gathering where the anthem was broadcast as part of the ceremony, he would render the required honors.

The same mark of respect prescribed for observance during the playing of our national anthem is shown toward the national anthem of any other country formally recognized by the Government of the United States.

Men in ranks salute only by command. In boats, only the boat officer, or, in his absence, the coxswain stands and salutes upon the playing of the national anthem; other members of the crew and passengers who are already standing, stand at attention; all others remain seated.

3. *Quarter-deck*. It has been noted in the previous discussion that the salute to the quarter-deck is rendered when leaving or coming on board ship, whether or not the colors are hoisted. For example, if you were coming aboard ship at midnight the ensign would not normally be hoisted, but a salute would be rendered just the same. In ancient times the Greeks and Romans placed their pagan altar on the quarter-deck, in the Middle Ages the shrines of the Virgin were placed aft in the same location, and today the national ensign is found there. The quarter-deck has always been the honored, ceremonial part of the ship and it has retained its sanctity. Respect is paid to it in the form of the hand salute and in other ways.

4. *Military funerals*. During funerals, officers and men remain covered while in the open, and uncover upon entering the church. During burial at sea, they remain covered throughout the service.

During religious services topside aboard ship and during formal religious ceremonies outdoors ashore (such as Easter sunrise service), officers and men remain uncovered throughout the entire ceremony.

In general, a military man uncovers during a religious ceremony but remains covered during a military ceremony. Church services, civilian funerals or burial services which the officer or man attends as a friend or relative rather than as a representative of the Navy, are religious ceremonies. Military funerals and burial at sea are regarded as primarily military ceremonies.

As for saluting, when called for, an officer or enlisted man salutes rather than uncovers at a military ceremony, as that is his traditional mark of respect. If an officer were attending a military funeral officially, he would salute whenever honors are rendered. Honors are rendered when the body is removed (a) from the hearse to the chapel, (b) from the chapel to the caisson, (c) from the caisson to the grave. They are also rendered when the volleys are fired and



Figure 5. Types of salute.

when "Taps" is sounded. However, as a participant at a nonmilitary funeral or burial service, he may, if he wishes, follow the civilian custom and uncover (rather than salute) when such honors are called for, as during the procession to the grave, the lowering of the body, etc.

It should be noted that Jewish custom calls for remaining covered during all religious ceremonies, and that therefore the rules regarding uncovering as stated above do not apply when the service is being conducted by a representative of that faith.

1B8. Types of salute. The main types of salute are: (1) the hand salute; (2) the rifle salute, at order arms; (3) the rifle salute, at right shoulder arms; and (4) the rifle salute, at present arms. Another type of salute is "Eyes right," given by men in ranks, when passing in review.

C. ETIQUETTE ASHORE

1C1. Miscellaneous situations. The question is sometimes asked: How do you greet civilians—by the salute, or otherwise?

The military salute is the mark and privilege of the military man. It is used in lieu of tipping the hat to women, and it may be used to greet civilian males.

Raising the cap is an unmilitary custom, which vanished when it was decreed that the salute to the flag and to superiors should be the hand salute. *Naval Customs, Traditions and Usage* says: "Since standing at attention and rendering the hand salute is the highest respect that one pays the colors of the Commander in Chief of the Navy afloat or ashore, it should suffice for the meeting with gentlemen or ladies in the open."

The procedure of getting into an automobile is the same as that of getting into a boat—juniors first in, last out. The junior takes his proper seat to the left. A lieuten-

ant and a captain getting into an automobile would get in in that order, with the lieutenant taking the seat in the far, or left-hand corner, and the captain on the right. When getting out, the captain would leave first. In entering buildings or rooms, however, the junior opens doors for the senior and enters last.

The junior always walks on the left. The custom of the "right hand rule" is an old one, quaintly expressed by George Washington in his 30th "Rule of Civility," which said: "In walking, the highest place in most countries seems to be on the right hand, therefore place yourself on the left of him whom you desire to honor."

Passing through the halls of a building, you may remove your cap or leave it on, as you choose. The cap is removed, of course, upon entering an office or any other room.

The idea of a naval officer carrying bundles was frowned upon in peacetime days. Today two new factors enter the picture. First, it is the Government's desire, under the ODT program, to conserve transportation—to encourage all citizens to carry parcels home themselves and thus save gasoline, rubber, and manpower. Secondly, it is frequently impossible to get delivery otherwise. While it may not add to the dignity of the uniform, it may be a necessary procedure at this time.

D. RELATIONS OF SENIORS AND JUNIORS

1D1. Foundations of naval courtesy. The phase of military courtesy which covers relations between officers and between officers and men has seen little change during the war. This is probably so for the reason that this relationship is the most fundamental part of all military courtesy, and the main source of most naval etiquette.

The twin foundations of military courtesy among officers are (a) precedence and (b) deference to seniors. Officers take precedence according to their rank, and this precedence is not confined to strictly military relations on ship or shore, but extends to the mess, to the club, and to social life.

1D2. Naval courtesy based on usages of polite society. Naval courtesy prescribes that junior officers shall accord their seniors certain indications of deference and respect, which correspond to those which younger men would accord to their elders under the usages of polite society. It also prescribes that seniors shall, with equal punctilio, acknowledge and respond to these tokens of respect required of juniors, so that there exists no semblance of servility in the interchange, but rather a sort of ritual for observance by those serving their country in a strictly ordered fraternity of military service.

1D3. Suggestions for juniors. A junior officer approaching a senior for the purpose of making an official report or request maintains an attitude of military attention. He does not take a seat, or smoke, until invited to do so. Some have brought up the question: Is it correct, when with a senior, to say, "Do you mind if I smoke, Sir?" Under some circumstances, it may be. But when with the Captain, the answer is definitely "No." And for anything approaching official

relations, the choice has been rather precisely expressed by one writer: The invitation should be "awaited" rather than "anticipated."

Unless he is on watch, a person in the naval service always uncovers when he enters a room in which a senior is present.

Unless it has been otherwise directed, when a senior enters a room in which junior officers or enlisted men are seated, the one who first sees him, orders "Attention." All present remain at attention until ordered to "Carry on."

Similarly, when a junior or enlisted man observes his group being approached by a senior (except at work or meals) he commands "Attention." Those present remain at attention until the senior makes the gesture to "Carry on." If addressed by a senior, a junior should, if seated, rise and remain at attention. Men seated at work, at games, or at mess are not required to rise when an officer, other than a flag officer or the Captain of the ship, passes, unless they be called to attention or when it is necessary to clear a gangway.

The place of honor is on the right. Accordingly, when a junior walks, rides or sits with a senior, he takes position alongside and to the left. When pacing to and fro, however, positions are not changed; the junior keeps step with the senior. On board ship, the senior is generally afforded the outboard position. The junior opens doors for the senior and enters last.

At parties, where the Captain is present, it is not considered good taste to leave before he does. If necessary to do so, respects are paid to him before departing.

Never offer to shake hands with a senior; he should make the first gesture. It is, however, considered good form to offer your hand to officers and men junior to you upon being introduced.

A junior avoids keeping a senior waiting. Punctuality is essential in the service. When called by a senior, the junior responds to him "on the double." A junior should recognize the tremendous importance of keeping all appointments, particularly with seniors.

In replying to questions from a senior, a junior avoids a great deal of embarrassment to himself, as well as to the organization in which he serves, by giving complete and explicit answers. If the junior does not know and cannot give a complete or correct answer, he must be honest and direct about it in his reply. He answers only as much of the question as he can without evading and misinforming. For example, a good honest, "I don't know, Sir, but I will find out and let you know," is a much better answer than an indirect one that conveys misinformation on which a senior may be basing an important decision. To avoid admitting ignorance, juniors sometimes make evasive statements which not only seriously affect their service reputation, but also confuse the issue.

It is an excellent practice for a junior who has been ordered to do an assigned task to report back promptly to the senior either the completion of the task or exactly what has been done about its completion.

When given an order, a junior does not ask how to carry it out, but studies the task. If advice is needed, he turns to his brother officers, but not, unless

unavoidable, to the one who gave him the order. He anticipates the wishes of his senior whenever possible.

An officer should not jump the chain of command. In other words, he does not consult anyone higher in that chain than his immediate superior without first being given authority by him to do so.

1D4. An order and a command. It is well at this point to differentiate between an order and a command. An *order* gives a junior a job to be done and leaves it up to him as to how it is to be done. It does not always specify the exact time when it shall be executed, but frequently fixes a time limit. A *command* directs a specific action, without alternatives. If you are an officer and tell your chief boatswain's mate you want him to have the Captain's gig painted by the end of the week, you have given him an order. If you tell the boatswain's mate on watch to pipe sweepers, you have given him a command.

By custom and tradition of the service, a senior's expressed wish or desire is the same as an order.

1D5. Social calls. Although social calls ashore in wartime are generally discontinued, an officer joining a ship may wish to know whether, in addition to reporting for duty, he should also make the usual visit of courtesy to his Commanding Officer within 48 hours. In wartime, this depends largely upon the circumstances, as there will be many times, naturally, when the Commanding Officer will have more urgent matters to take up his time. In this connection, the executive officer may be the guide, for the normal procedure is to ask him when it would be convenient for the Captain to receive you.

If the courtesy visit is made, it lasts about ten minutes, unless the caller is requested to remain longer. Young officers would be well-advised during calls upon seniors to be natural in demeanor and restrained in conversation. The exit should be graceful and one should never stand and become involved in a long conversation after making preparation for departure. This social call is a good opportunity for the Captain to get the "cut of the jib" of the new officer.

1D6. Addressing seniors. There is only one proper response to an oral order — "Aye, aye, Sir." It means, I understand and will obey. Such responses to an order as "O.K., Sir," "All right, Sir," or "Very well, Sir," are taboo. But "Very well" or "Very good" is proper when spoken by a senior in acknowledgment of a report made by a junior.

The word "Sir" should be employed as a prefix to an official report, statement, or question addressed to a senior. It should also be used when addressing an official on duty representing a senior. For example, the officer of the deck, regardless of rank, represents the Commanding Officer, and should be addressed as "Sir."

A junior, addressing a senior, should introduce himself unless certain that the senior knows him by sight.

There are certain differences in phrasing which should be noted: A senior officer sends his "compliments" to a junior. For example, "Admiral Smith presents his compliments to Captain Brown and says," etc. A junior never pre-

sents his compliments to a senior, but sends his "respects." When making a call upon a Commanding Officer, it is perfectly correct to say, "Captain, I came to pay my respects," or to say to the orderly before entering the cabin, "Tell the Captain that Ensign Jones would like to pay his respects."

In written correspondence, the senior officer may "call" attention to something, but the junior may only "invite" it. A junior writing a memorandum to a senior subscribes it "Very respectfully"; a senior writing to a junior *may* use "Respectfully."

2

NAVAL COURTESY AND CUSTOMS—PART II

A. INTRODUCTION

2A1. Material to be discussed. In this chapter the following phases of naval courtesy and etiquette will be considered: courtesy to women; forms of address and introduction; quarter-deck etiquette, wardroom etiquette, and boat etiquette. In addition to this material three sections are included: relations of officers and enlisted men; hints to junior officers; and specific problems in naval courtesy presented in the form of questions.

B. COURTESY TO WOMEN

2B1. Women in uniform. In most cases the new questions of courtesy brought up by the presence of women in the Navy, Marines, and Coast Guard are solved simply—the rules of military courtesy apply, and rank takes precedence.

Since military courtesy also includes deference to women, and since a senior's wish is also an implied command, there may be occasions when a senior male officer will indicate that he prefers courtesy to women above strict military usage. In such a case, the junior woman reservist acts accordingly without any hesitation or embarrassing counter-deference.

2B2. Walking with women. When walking with a woman it is proper to give her the same place of honor you would give a senior officer—on your right. It has also been a custom for many years for the man to take the outside of the walk, although the reasons for this are by now somewhat outdated.

In the days when there was more likelihood of being splashed by mud when carriages dashed by, it was a normal and reasonable courtesy for the man to take the outside and thus provide shelter. It was also a protection to the woman in case passing horses reared, or bucked, or swerved in their course.

Although there is no longer much justification for this precaution, the custom has remained, so it is just as well to observe it rather than seem to be withholding a common courtesy. The positions on the outside or on a woman's left are both perfectly correct.

When walking with a woman one offers his arm only when assistance is appropriate, such as when there is a real necessity of assisting her through crowded traffic or over rough ground or other impediment. Usually the man does not take her by the arm, but allows her to take his.

When walking with more than one woman, traditional etiquette has been for the gentleman not to take the middle position, but rather to remain on the

outside. This, however, cannot be binding since its main justification went out with the horse and buggy.

If there are two men and one woman, the woman walks between them, where she is equally accessible to both her companions.

When walking with women in uniform (upon social rather than military occasions), a different problem comes up. Do you, if you are senior, take the inside or right-hand position? Or do you, as a gentleman, accord that courtesy to the woman? On a social occasion, be a gentleman. Dinner-and-the-movies is no place for rank.

2B3. Courtesy in public vehicles. In streetcars and busses, the question of whether you rise and give your seat to a woman is not so much a matter of military courtesy as it is just a matter of courtesy. It's a temptation, doubtless, to remain seated. However, women rated that courtesy from men in peacetime and they are, if anything, working harder now that war is here, with millions of them in factories or in homes, without help, and doing long stretches of work.

So while one isn't required to give up his seat, he shouldn't work on the theory that being in uniform has absolved him from normal requirements of courtesy. Any courtesy extended by a man in uniform reflects favorably not only on him but on the naval service.

2B4. Courtesy in elevators. More and more it is becoming the custom for men not to remove the hat when in an elevator with women. One frequently finds in public elevators a sign reading, "Please do *not* take off your hat." This obviously is to conserve space. If it is proper to keep the hat on, it may nevertheless become a problem to know what to do if others take off their hats when a woman enters. While one would be correct in keeping the cap on, it might prove embarrassing. In such a case, the common-sense thing would be to follow the example of the others, not only for one's peace of mind, but lest he appear to be withholding a courtesy which others were willing to offer freely.

C. FORMS OF ADDRESS; QUARTER-DECK, WARDROOM, AND BOAT ETIQUETTE

2C1. Forms of address and introduction. Although the military customs generally predominate, there are some slight differences in methods of addressing and introducing military personnel, according to whether you are in military or civilian circles at the time.

Naval officers with the rank of commander or above, in both line and staff, are always addressed and introduced by their titles. Those with the rank of lieutenant commander or below are generally addressed and introduced in military circles as "Mr._____."

Officers of the Medical Corps are addressed by their titles, if commander or above, while those of the rank of lieutenant commander or below are addressed as "Dr._____." (However, if a senior officer of the Medical Corps prefers to be addressed as "Dr." rather than by his military title, such preference should, of course, be honored.)

All chaplains are properly addressed as "Chaplain," regardless of their rank. A captain or commander of the Women's Reserve and the Navy Nurse Corps should be introduced by title, but thereafter may be addressed as "Miss (or Mrs.) Jones." Below the rank of commander, "Miss" or "Mrs." is used for both introduction and address. When the marital status of a WAVE or Nurse Corps officer is not known, use the title of her rank in addressing her.

A chief warrant officer or warrant officer is never addressed as "Chief." He is always called "Mr. _____. " A midshipman is also addressed and introduced as "Mr. _____."

In general, it is preferable to call a senior by his title and name, that is, Commander Doe, Mr. Wilson, etc., rather than by the impersonal "Sir." In prolonged conversation, where the repetition of this would seem forced or awkward, the shorter "Sir" is naturally used more often.

The correct response to a question from a Women's Reserve officer is "Yes, lieutenant," or "Yes, Miss Brown." The Navy Department has not authorized the use of "Ma'am" or "Sir" in addressing officers of the Women's Reserve.

In any naval organization there is only one "Captain," the regularly assigned Commanding Officer, who may be addressed as "Captain" regardless of his rank. There is also only one "Commander," the regularly assigned executive officer (if of the rank of commander), who may be addressed as "Commander," without appending his name. However, the present tendency is to address the executive officer as "Commander" even though his rank is that of lieutenant commander. In actual practice, the use of "Captain" or "Commander" without the name is frequently heard ashore, where more of those ranks are regularly encountered than would normally be found on any ship.

Addressing a lieutenant commander as "Commander," for short, has no foundation in naval etiquette nor should it be mistakenly used as a form of courtesy to the officer concerned. In this, Navy usage differs from Army, where a lieutenant colonel may be addressed as "Colonel."

The title, lieutenant commander, was introduced in the United States Navy in 1862 with the reorganization of the service. Previous to this time, all lieutenants in command of smaller men-of-war were called "lieutenant commanding," and so signed themselves. From this was derived the title "lieutenant commander."

A naval officer is introduced to civilians by his title, and the method of introduction should give the cue as to how he should be addressed from then on. If you were introducing an officer below the rank of commander, you might say, "This is Lieutenant Jones. Mr. Jones is an old shipmate of mine." This serves a double purpose: it gives the civilian to whom you are introducing an officer knowledge of the naval man's rank, in the event he does not know it, and it also gives him the correct method of address—"Mr. Jones."

With Women's Reserve and Navy Nurse Corps officers, the procedure is similar, except that with all ranks you would use "Miss" or "Mrs." after introducing them by their titles.

NAVAL COURTESY AND CUSTOMS—II

19

HOW TO ADDRESS AND INTRODUCE NAVAL PERSONNEL

Person addressed or introduced:	To MILITARY PERSONNEL.		To CIVILIANS	
	Introduce as:	Address as:	Introduce as:	Address as:
Naval Officer (Comdr. or above)	Captain (or appropriate rank) Smith	(same)	Captain Smith ¹	(same)
Naval Officer (Lt. Comdr. or below)	Mr. Smith	(same)	Lt. Comdr. Smith ²	Mr. Smith
Women's Reserve Officer (Comdr. or above)	Commander Smith	Miss (or Mrs.) Smith	Commander Smith	Miss (or Mrs.) Smith
Women's Reserve Officer (Lt. Comdr. or below)	Miss (or Mrs.) Smith	(same)	Lt. Comdr. Smith	Miss (or Mrs.) Smith
Medical Corps Officer (Comdr. or above)	Commander Smith ³	(same)	Commander Smith	(same)
Medical Corps Officer (Lt. Comdr. or below)	Dr. Smith	(same)	Lt. Smith, of the Naval Medical Corps	Dr. Smith
Chaplain Corps Officer	Chaplain Smith	(same)	Chaplain Smith	(same)
Navy Nurse Corps Officer (Comdr. or above)	Commander Smith	Miss (or Mrs.) Smith	Commander Smith, of the Navy Nurse Corps	Miss (or Mrs.) Smith
Navy Nurse Corps Officer (Lt. Comdr. or below)	Miss (or Mrs.) Smith	(same)	Lt. Smith, of the Navy Nurse Corps	Miss (or Mrs.) Smith
U. S. Public Health Service Officer (M.D. or dentist)	Dr. Smith ⁴	(same)	Dr. Smith, of the Public Health Service	Dr. Smith
U. S. Public Health Service Officer (Sanitary Engineer)	Mr. Smith	(same)	Mr. Smith, of the Public Health Service	Mr. Smith
Commissioned Warrant Officer	Mr. Smith	(same)	Warrant Officer Smith	Mr. Smith
Midshipman	Mr. Smith	(same)	Midshipman Smith	Mr. Smith
Warrant Officer	Mr. Smith	(same)	Warrant Officer Smith	Mr. Smith
Chief Petty Officer	Chief Machinist's Mate Smith		Chief Machinist's Mate Smith	Mr. Smith
Aviation Cadet	Aviation Cadet Smith	Mr. Smith	Aviation Cadet Smith	Mr. Smith
Petty Officer	Use name and rate, as: Smith, Gunner's Mate, 2nd	Smith	Gunner's Mate Smith or Petty Officer Smith	Mr. Smith
Seaman	Seaman Smith	Smith	Seaman Smith	Mr. Smith

¹When not in uniform (as in peacetime, or in beach attire) a captain or lieutenant would be introduced as "of the Navy" to distinguish his rank from the similar-sounding Army one.

²A suggested form of introduction is: "This is Lieut. Comdr. Smith. Mr. Smith is now stationed here." This indicates both (a) the officer's rank and (b) how to address him.

³If a senior officer of the Medical Corps prefers to be addressed as "Dr.," such preference should be honored.

⁴In any case where you had reason to believe the Dr.'s insignia might not be recognized, it would be correct to add "—of the Public Health Service" in introducing him.

As many people are not familiar with all Navy rank insignia and corps devices, it's usually a good idea to let an introduction, however brief, be reasonably informative. A lieutenant in the Navy Nurse Corps might be introduced by saying, "This is Lieutenant Johnson. Miss Johnson is in the Navy Nurse Corps here." With a WAVE: "This is Lieutenant Commander Jones. Miss Jones is on duty at the Navy Department."

The Navy today is a cross section of America. In the same family, one man may be machinist's mate and his brother a lieutenant. The ensign's sister is a WAVE yeoman, and so on. General Pershing holds the highest U. S. military rank, General of the Armies, but his son entered this war as a private. The present Secretary of the Navy entered the last war as a seaman second class.

So, while the distinction between officer and enlisted personnel still exists in all formal and official relations, it does so less and less in nonmilitary relationships.

Military and civilian practices differ in introducing and addressing enlisted personnel. Under military conditions, enlisted personnel are known by their last names. That is the customary and expected procedure. But in a social gathering, civilians would feel unnecessarily curt in addressing any enlisted man or woman by the last name alone.

It is customary therefore for those outside the service to extend to an enlisted man or woman the same courtesies they would naturally have extended to them in civil life, and to prefix their names with "Mr.," "Miss" or "Mrs." as the case may be. In introducing them, one procedure might be to give the rating and name, then the mode of address, as in: "This is Machinist's Mate Smith. Mr. Smith will be visiting us for a while."

On the other hand, a procedure which has greater simplicity is that which is generally used with enlisted personnel of the Army, introducing them by rank rather than by specialty: "Sergeant Jones," "Corporal Smith," "Private Har-grove," and so on. The nearest equivalent in Navy terminology would be the term "petty officer," and this could be used to provide a simple method of introduction: "This is Petty Officer Jones." Below petty officer, you would say, "This is Seaman Jones" or "Fireman Jones." Both would thereafter be addressed as "Mr. Jones."

2C2. Quarter-deck etiquette. Unlike wardroom etiquette, quarter-deck etiquette has changed but little during this war. It is well to remember when on the quarter-deck that this has always been the honored, ceremonial part of the ship and that it still retains its sanctity.

When an officer comes on board a ship, he salutes the officer of the deck and says, "I report my return aboard, Sir," if it is his own ship, or "I request permission to come aboard, Sir," if visiting the ship. Upon leaving his own ship, the officer, as he salutes the officer of the deck, says, "I have permission to leave the ship, Sir." If a visitor, the officer says, as he salutes, "With your permission, I shall leave the ship, Sir."

The etiquette of the quarter-deck should be strictly enforced by the watch officer. The quarter-deck should be kept immaculate and its ceremonial character

maintained. For officers and enlisted men alike, adherence to these rules is required:

1. Avoid appearing on the quarter-deck out of uniform.
2. Never smoke on the quarter-deck.
3. Avoid putting hands in pockets especially on the quarter-deck.
4. Avoid horseplay on the quarter-deck.
5. Never walk on the starboard side of the quarter-deck unless invited by the Admiral or the Captain.
6. Don't engage in recreational athletics on the quarter-deck unless it is sanctioned by the Captain, and then only after working hours.

The starboard gangway to the quarter-deck is used by all commissioned officers, warrant officers, and their visitors; the port gangway is used by all others. If the construction of the ship or other circumstances make a change in this rule expedient, the change may be made at the discretion of the Commanding Officer. In heavy weather, the lee gangway is used by everyone.

The term, officer of the deck, is frequently misunderstood by newcomers in the Navy. He is the officer on watch in charge of the ship (normally on duty for four hours) and represents the Captain. He is responsible for the safety of the ship, subject, however, to any orders he may receive from the Captain. Every officer or other person on board ship, whatever his rank, who is subject to the orders of the Commanding Officer, except the executive officer, is subordinate to the officer of the deck.

It is important for the officer of the deck to know who is approaching his ship at all times. Small boats nearing a vessel at anchor at night are hailed by the sentries, gangway watch, or quartermaster with "Boat ahoy!" The boat coxswain returns the hail according to personnel aboard as follows:

"United States"—if the President of the United States is aboard.

"Navy"—if the Secretary of the Navy is aboard.

"Fleet"—if the Commander-in-Chief of the Fleet is aboard.

"Name of ship"—the ship's name is given indicating that its Commanding Officer is aboard.

"Aye, aye"—if a commissioned officer is aboard.

"No, no"—if a midshipman or warrant officer is aboard.

"Hello"—if an enlisted man is aboard.

"Passing"—boats not intending to come alongside, regardless of rank of passengers.

Honors to the colors. Naval ships at anchor or moored hoist the national ensign at the flagstaff aft at 0800 and lower it at sunset. The union jack, likewise, is hoisted and lowered at the jackstaff forward at the same times. At colors, the national ensign is hoisted smartly, lowered slowly, and must never touch the deck. At both morning and evening colors, "Attention" is sounded, and all officers and men face the ensign and render the salute. At shore stations and, in peacetime, on board large vessels where a band is present, the national anthem is played during the ceremonies. In the absence of a band, a bugler, if

available, sounds "To the Colors" at the morning ceremonies and "Retreat" at sunset formalities. (When a naval ship is underway, the jack is not hoisted, but the ensign is normally flown at the gaff.)

When a merchant vessel, registered by a nation formally recognized by the Government of the United States, salutes a ship of our Navy by dipping her national ensign, it must be returned dip for dip. No American naval ship dips her ensign, however, except in return for such a compliment.

In half-masting the ensign, it is first raised to the truck or peak and then lowered to half-mast. Before lowering from half-mast, the ensign is first raised to the truck or peak and lowered with the usual ceremonies.

In the large assortment of flags carried by American men-of-war, only one flies above the national ensign. It is the church pennant. We do not know when it was first flown by the Navy. It was, however, flown in 1842 on the United States brig *Somers*, during the religious services following the execution of the three men charged with attempted mutiny. In the words of Alexander Slidell Mackenzie, the captain: "The colors were then hoisted, and above the American Ensign was raised the Banner of the Cross—the only flag that ever floats above it from any vessel under my command." It was also hoisted during the divine service on 26 April 1862 on Farragut's flagship, the *Hartford*.

2C3. Wardroom etiquette. The whole subject of wardroom etiquette has undergone so many changes due to the exigencies of war and battle that perhaps the best approach would be, in the interest of completeness, to take up the generally prevailing rules of wardroom etiquette as they would be under peacetime conditions, and then to show some of the variations that have been brought about by war.

The wardroom is the commissioned officers' mess and lounge room. The main peacetime rules of its etiquette were:

1. Don't enter or lounge in the wardroom out of uniform.
2. Don't sit down to meals before the presiding officer does. (Exception: at breakfast.)
3. If necessary to leave before the completion of the meal, ask to be excused.
4. Always introduce guests to wardroom officers, especially on small ships.
5. Never be late for meals. If you are unavoidably late, make your apologies to the presiding officer.
6. Don't loiter in the wardroom during working hours.
7. Avoid wearing a cap in the wardroom, especially when your shipmates are eating.
8. Avoid being boisterous or noisy in the wardroom.
9. Don't "talk shop" continuously.
10. Pay mess bills promptly.
11. Gambling or drinking on board ship is a general court-martial offense.
12. Remember that the more experienced officers in the mess will respect a frank admission of ignorance, but that they will soon "have your number" if you assume a presumptuous attitude and continually make blunders.



Figure 6. Officers relax as they listen to latest war news over the radio in wardroom of U.S.S. Iowa.

13. In general, the young officer pursues the correct course by being the best listener in the mess.

One of the oldest mess customs is that religion, politics, and women should not be discussed. "Bulkheading" or unfavorable comments and opinions in regard to senior officers is not tolerated. Good manners with a consideration for other members and their guests constitute the first principles to which all other mess regulations are secondary.

The executive officer is the president of the mess. *Navy Regulations* prescribes the seating arrangement. Officers are assigned permanent seats at the table; alternately, in the order of the rank, to the right and left of the presiding officer, except that the seat opposite that of the presiding officer is occupied by the mess treasurer. (Second ranking officer sits to the right of the presiding officer, third to the left, etc.)

Today, in many cases, the routine of the wardroom is vastly different from that which has just been described. Regular mealtimes are out of the question when at General Quarters. If one always waited for the presiding officer to sit down, before starting to eat, the situation would sometimes be unfortunate.

Many an officer can report that, instead of eating in the wardroom, he has subsisted on sandwiches and coffee served topside whenever he could snatch a hasty bite, and that this has sometimes gone on for days at a stretch. A rule about never being late for meals is hardly binding under such circumstances.

Also, the custom of not "talking shop" was a useful one in times when war was not the business of the day and when in addition you had opportunities of picking up other subjects of conversation. Today, a frequent reaction is, "What else is there to talk about?" Mealtimes frequently a chance to exchange those little bits of information about experiences that increase the knowledge of all fighting men. "Talking shop," in such cases, leads not to too much dullness in the conversation, and may even breed a little more trouble for the Axis in the long run.

Even the seating arrangements in some wardrooms have undergone a change. A ship may scatter her higher ranking officers among many tables rather than concentrate them at one place, where a chance enemy hit might wipe out all of them at once. It is sometimes the custom, when eating in shifts, to see that there is a "cross-sectioning" of rank among the various shifts, for the same reason.

In peacetime, wardroom etiquette may go back to the old system, but for the duration, common sense and necessity have combined to bring about a few changes.

The officers' mess is organized on a businesslike basis. There is a Mess Fund to which the officer must contribute his share on joining the mess. An officer receives a ration allowance from the Navy and it is a courteous gesture for him to ask the mess treasurer, within the first twenty-four hours, for his mess bill and mess entrance fee and pay them at once. The monthly mess assessments defray the cost of food, periodicals, other essentials, and conveniences. This fund

is administered by the mess treasurer, who is elected by the members. He must serve if elected, but is not required to serve longer than two months consecutively. His work involves the purchase of food, preparation of menus, and supervision of service. It is recognized as collateral duty, and attention is paid to it in the marking of an officer's report of fitness. As with all things, study and attention are required to do the job well. Some perform this task exceptionally well with full attention to balanced diets, light appetizing luncheons, and planning with the steward for new dishes and variety in menus. At the close of each month, the mess treasurer must render to the mess a statement of the accounts of the mess.

2C4. Boat etiquette. Boat etiquette may be summed up by the following instructions.

1. Unless otherwise directed by the senior officer present, officers enter boats in inverse order of rank (juniors first) and leave them in order of rank (juniors last).
2. Always stand and salute when a senior enters or leaves a boat, unless you are an enlisted man and there is an officer or petty officer in charge to render the honors.
3. When a senior officer is present, do not sit in the stern sheets unless asked to do so.
4. The seniors are accorded the most desirable seats.
5. Always offer a seat to a senior.
6. When leaving ship, get in the boat a minute before the boat gong, or when the officer of the deck says the boat is ready—don't make a last-second dash down the gangway.
7. If the boat is crowded, and you are junior, get off and get on the next one.
8. Juniors show deference to seniors by not crossing the bows of their boats, crowding them or ignoring their presence.
9. A landing over another boat should not be made without permission, and permission to do so is not requested if it can be avoided.

D. RELATIONS OF OFFICERS AND ENLISTED MEN

2D1. Basis of relations. The officer's relations with his men should be founded on mutual respect. The American bluejacket on the whole is intelligent, cooperative, ambitious, and eager to make good. He wants to be treated like a man and expects his abilities to be appreciated. He wants to like his officers—to admire them and to be able to brag about them to the men of other ships.

An inexperienced officer, in his relationship with his men, is likely to be hesitant and uncertain. He finds himself in an unfamiliar situation, among people who are strangers to him. By virtue of his commission he is placed in charge of enlisted personnel and this newly acquired authority is strange to him. He wants to be liked by his men, to know them as individuals, and yet maintain his rightful authority over them.

Personal dignity is a quality which the young officer must cultivate. It is that undefinable something possessed by certain leaders which enables them to converse at length with their men on casual and unofficial matters, and yet at the same time maintain that reserve which discourages the slightest tendency to familiarity.

However, consideration for enlisted men is always in order. For example, if an officer of the deck finds it necessary to send a boat crew away during meal hours, he should order the commissary steward, chief police petty officer, and ship's cook to save hot meals for them.

2D2. Avoiding familiarity. Some new officers feel that they promote friendliness between themselves and their men by calling the men by their first names or, worse still, by their nicknames. Nothing could be further from the truth. The men should be addressed by their last names and only by their last names.

An officer should never permit enlisted men to visit him in his room or in the wardroom country unless the matter is extremely urgent. He should arrange to see them in his department office or in his part of the ship.

As pointed out in Chapter 17, *Navy Regulations* are most specific in money matters and absolutely forbid financial transactions between officers and enlisted men.

2D3. Treatment of steward's mates. Steward's mates are in charge of the wardroom, pantries, galley, and officers' rooms. Most of them are Negroes, although there are a number of Chamorros (natives of Guam) and Filipinos. Since they are constantly in rather close contact with officers and have frequent occasion to be in the wardroom and in the officers' rooms, there is a tendency to become too familiar with them, or perhaps, at times, to be brusque with them. The officer should always be tactful in his dealings with steward's mates. They are readily amenable to discipline if properly handled. If an officer feels that a complaint is in order, or disciplinary action is necessary, he should deal directly with the mess treasurer who has charge of the steward's mates.

Tipping of steward's mates—or any other enlisted man—is forbidden by implication in the article of *Navy Regulations* which forbids financial transactions of any sort between officers and enlisted personnel.

2D4. Conclusion. In conclusion, it should be pointed out that the relation between officers and men is founded upon the same mutual respect as that between fellow officers. The measure of respect which an officer inspires in his men is the measure of that officer as a man and a sailor; his sincerity; his sense of justice; his interest and concern for his men's welfare; his dignity and bearing; his firmness and consistency in requiring obedience to his own, or the Captain's orders; and his interest in and knowledge of his profession. It is well to study constantly the methods of officers who are experts in handling enlisted men in order to learn their technique.

HINTS TO JUNIOR OFFICERS

Excuses for failure or negligence are generally unacceptable. An officer should

assume responsibility and not depend on alibis. He should freely accept the blame if the failure is his.

A phrase in common use at the Naval Academy is "greasey," indicating servility, or *bootlicking*, meaning a deliberate courting of favor. This type of currying favor finds no place in a naval officer's life and should be shunned. It is sometimes mistaken for an officer's desire to please and make good. It is well to be cooperative, willing and ambitious, but never to be "greasey." When an officer has done a job to the best of his ability he should be content with the satisfaction this fact gives him and not run to his superior to tell him he has done so and so. Of course when a report is in order it should be made. The fact that work is well done generally reaches the ears of superiors.

The conduct of members of the service must be above criticism. Being in the public eye, it is requisite at all times to add honor to the service uniform. The Navy will be judged by the officer's appearance and behavior. Most people will be proud to see him evincing a dignified determination to do credit to the uniform.

It should be remembered that all undertakings and projects must be carefully considered in advance, and all preparations necessary to the success thereof must be made well in advance. Officers hold their positions because they are believed to be capable of thinking ahead and making intelligent plans, and they must always strive to demonstrate that they are entitled to the rank they hold.

One of the best things that can be said about a junior officer by senior officers is that when he is given a job he can always be depended upon to get action and satisfactory results.

An officer cannot learn too soon that every officer has two personalities, the official and the unofficial. An officer who plays the "good fellow" on watch is sooner or later bound to come to grief. Holding a boat for a brother officer who is late is an example of this trait. It is a poor excuse to offer the executive officer that his written order contained in the boat schedule has been disobeyed simply because another officer requested it.

Whenever an officer receives an order requiring transmittal to subordinates for action, it is his duty to see that the order is *promptly* and *smartly executed*. His responsibility in the matter does not end until the order has been carried through to its proper completion.

Sometimes an officer may not approve of certain orders that come down from above. Nevertheless, he must follow these orders implicitly and see that they are obeyed by his men. The promulgating of such orders may seem difficult. However, an officer should never apologize for them. He should never question an order in front of his men.

When a young officer reports on board ship it is important that he devote most of his spare time to professional reading and getting acquainted with his ship's organization and regulations. It is well that a certain amount of time each day be set aside for professional study.

It is a wise procedure for an officer never to request permission to leave the

ship in the afternoon until the work assigned or expected of him has been completed. There is much to be learned in the first few months aboard ship. It is well to avoid being known as a "beach hound."

A junior officer of a division should always be in his part of the ship in the morning *before* his division officer arrives. He should also make it a point to be at general drills before his division officer. He should invariably address him as Mister. It is an excellent idea for a junior division officer to keep a complete notebook of his division, showing names, initials, rate, bunk and billet numbers, along with all watch, quarter, and station assignments. The book should be small enough to be carried on his person. It is also a good idea to keep confidential records concerning various men in the security of one's room. This information will be of service when giving quarterly marks and recommending men for advancement in rating.

The new officer will be kindly but critically evaluated by officers and men as soon as he comes aboard his ship. Senior officers do not always call attention to minor faults or errors made by junior officers, but they are sure to notice them and will form their opinions accordingly. While they will make due allowance for lack of experience, their final estimate will be based entirely on what the young officer contributes. It is well for him to be ever alert and to analyze his conduct frequently to determine if by chance he is offending unintentionally. A lack of deference toward older officers or a tendency to become familiar with them, or harsh unreasonable handling of enlisted men, or irresponsibility and lack of initiative will in each case produce unfavorable comment and an impression that will take some time to remove.

Some officers are prone to think that their badge of office will carry them through all difficult situations even though they are not fully qualified for the responsibilities of their office. They will find this to be absolutely untrue.

An officer should be particular about his appearance. He should wear his good clothes at quarters and his best clothes at inspection.

An outstanding naval officer of the nineteenth century, Matthew Fontaine Maury, said: "Make it a rule never to offend, nor to seek causes of offense in the conduct of others. Be polite to all, familiar with but few. The rule in the Navy is to treat everybody as a gentleman until he proves himself to be otherwise. It is a good rule—observe it well."

It is customary for the members of the junior officers' mess to address each other by their last names in unofficial conversation. However, when a junior officer is a member of the wardroom mess, he addresses seniors of the rank of lieutenant commander and below as "Mister," and those above that rank by the title of their rank, i.e., "Commander," "Captain," etc. The Commanding Officer is, of course, always addressed as "Captain." The senior officer of the wardroom mess will always welcome a junior officer and treat him as a full-fledged member of the mess in every respect. Nevertheless, it is well for the junior officer not to be too forward in conversation or action. An error on the side of formality is more readily pardoned than one in the other direction.

It has long been the custom in the Navy to be prepared and to relieve the watch not later than 10 minutes before the bell. This requires being on the bridge at sea 15 or 20 minutes before the bell. Late relieving is not only a breach of naval custom but is discourteous and unpardonable.

Disinclination to assume responsibility is an indication of lack of moral courage. To accept responsibility willingly, strengthens a man's character.

It is well to remember that there are no limiting working hours for officers.

When invited to a private home for dinner, there may be a tendency to extend the call longer than was implied in the invitation. The atmosphere of a home is a welcome change to one who has been living a regimented life. One officer candidate was invited to 1230 Sunday dinner at the home of new friends and was most welcome. However, when he had made no move to take his departure by 1700, he caused a situation in the household that made his hosts hesitant in inviting other officer candidates. The desirable guest is one who never overstays his welcome and who, when he perceives that he has called at an inconvenient time, tactfully makes his departure.

General Shank says: "Of all the valuable qualities an officer can have, few of them are superior in importance to tact. In a military sense it means a knowledge and an appreciation of *when* and *how* to do things. Tactful officers know how to deal with their shipmates—both senior and junior. The usefulness of many an otherwise capable officer has been marred because of the lack of tact. The importance of tact in an officer's career cannot be overemphasized."

It is well to remember, in conclusion, that all organizations in society have certain customs and etiquette. These are especially necessary for smooth co-operation between men living close together as is done on board a man-of-war. Disregard of customs and etiquette mark an officer as careless, ignorant, or dilatory. It is true that some ships, especially smaller ships, may not follow these customs as strictly as the larger ones, but strict compliance with what has been said is the only safeguard until one has become thoroughly familiar with any slight variations allowed on board.

In closing, it should be emphasized that every officer and man takes a pride in naval traditions and eagerly conforms to the customs and etiquette of the service. It is of interest to know that these traditions and customs stem from ancient times and are the honorable heritage of men who "go down to the sea in ships."

Now these are laws of the Navy
Unwritten and varied they be;
And he that is wise will observe them,
Going down in his ship to the sea.
As the wave rises clear to the hawse pipe,
Washes aft, and is lost in the wake,
So shall ye drop astern, all unheeded,
Such times as the law ye forsake.

Now these are the laws of the Navy,
And many and mighty are they.
But the hull and deck and the keel
And the truck of the law is—OBEY.

—Captain Ronald Hopwood, R.N.

SPECIFIC PROBLEMS IN NAVAL COURTESY

The following are a few questions on naval courtesy and customs which will serve as a review of the material presented on this subject in the preceding two chapters.

1. If addressed by an officer, does an enlisted man salute: (a) at the beginning of the conversation? (b) at the end? (c) at both beginning and end of conversation?
(If he is in formation, he does not salute at all, but just comes to attention. If not in formation, he salutes at beginning and end of conversation.)
2. When does a member of the guard *not* salute an officer?
(When engaged in the performance of a duty which prevents saluting.)
3. A lieutenant is walking with a commander. They meet a lieutenant commander. Who salutes first? Why?
(Lieutenant commander. The lieutenant cannot salute first, as he must wait upon the pleasure of his senior officer. Therefore, the lieutenant commander, upon approaching, renders the salute to the commander. The commander returns the salute, and the lieutenant also salutes at the same time.)
4. Is "Eyes right" a salute?
(Yes, for men in ranks passing in review.)
5. When two naval officers meet on the street, both of the same rank but not knowing their comparative seniority, which salutes first?
(They salute mutually, but in any case there should be no hesitation on the part of either, or delay in rendering the salute.)
6. When is the salute rendered not at 6 paces but when abreast?
(When overtaking a senior.)
7. What do officers salute besides each other? (Note: not "whom," but "what.")
(The national anthem, the national ensign, and the quarter-deck.)
8. When officers of varying rank are walking in company, and are tendered a salute, do the junior officers wait for the senior to acknowledge the salute, or do they acknowledge it immediately?
(They wait upon the senior, and salute with him.)
9. Are reserve officers not on active duty (and not in uniform) entitled to a salute?
(No.)
10. Is it proper to salute an officer in the Public Health Service?
(Yes.)
11. Does one salute officers in the Maritime Service?
(Officially no, but yes by courtesy under proper circumstances.)
12. What kinds of salute or salutes can you name?
(A few are: Hand; rifle (at order arms); rifle (at right shoulder arms); rifle (at present arms); "eyes right.")

13. Their right hands occupied, an Army officer and a naval officer meet. May they salute each other with the left hand?
(The naval officer may, the Army officer does not.)
14. An officer, covered, and walking down a passageway of a Navy building encounters a senior officer who is uncovered. Should he salute?
(Yes. However, the uncovered officer cannot return it except by a nod or greeting.)
15. The same officer, still covered, reports in the building to a senior officer. Should he salute?
(No. He should uncover before reporting.)
16. If a naval officer of the line meets a staff officer of the same rank, which salutes first?
(If the line officer has an earlier or the same date of rank, then the staff officer salutes first. However, if the staff officer has a prior date of rank, the line officer salutes first.)
17. When an officer awards an enlisted man a decoration or citation, should the officer salute first?
(While no specific regulation can be found, the practice is that an enlisted man after receiving an award steps back and salutes the officer and the officer returns the salute.)
18. If an enlisted man is walking with an officer, and another enlisted man approaches and salutes, does the enlisted man walking with the officer also salute?
(No. *Navy Regulations* authorizes salutes only between officers and officers, and between officers and enlisted men.)
19. If a member of the Women's Reserve is in church and the national anthem is played, does she salute? May she sing with the congregation?
(In such instances it is presumed that the hat is not being worn as a badge of office, but is in conformance to civilian rather than military custom. She should not salute, but stand at attention. It is permissible to join in the singing.)
20. Should one sit in the stern sheets of a boat if a senior officer is present?
(No, unless invited to do so.)
21. If one is passing a radio store and hears the strains of the national anthem being broadcast, should one stop on the sidewalk and salute?
(No.)
22. If one steps into a hotel elevator in which women are present, should one remove the cap?
(Good judgment and circumstances should determine. In crowded elevators, it is customary not to remove the cap. However, if others do so, one may follow suit rather than seem to be withholding a courtesy.)
23. When introduced to a senior, should one make the gesture to shake hands?

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(No. The gesture may, however, properly come from the senior.)

24. Is it proper to address a lieutenant commander as "Commander"?
(Actually no, although lieutenant commanders who are executive officers of ships are frequently so addressed.)

25. On what occasions should an officer who is attending a military funeral (officially) salute?
(He salutes whenever honors are rendered. Honors are rendered when the body is moved from (a) the hearse to chapel, (b) chapel to caisson, (c) caisson to grave; also during the firing of volleys and sounding of "Taps.")

3

RANKS AND RATES

A. OFFICERS

3A1. General. You, as potential naval officers, will be required to become authorities on the ranks, ratings, and insignia of the Navy. You should also be able to recognize and know the meaning of most of the insignia worn by our other armed forces.

3A2. Ranks of officers. An officer in the United States Navy may be either a commissioned officer or a warrant officer. Commissioned officers hold a commission which is granted by the President and signed by the Secretary of the Navy. Warrant officers derive their authority from a warrant which is granted by the Secretary of the Navy.

The commissioned officers' ranks in the Navy which correspond to those of the Army and Marine Corps are shown below. It is interesting to note that the Marine Corps officers, although officially a part of the Navy, have the same ranks as the Army.

<i>Navy</i>	<i>Army or Marine Corps</i>
Fleet Admiral	General of the Army
Admiral	General
Vice Admiral	Lieutenant General
Rear Admiral	Major General
Commodore	Brigadier General
Captain	Colonel
Commander	Lieutenant Colonel
Lieutenant Commander	Major
Lieutenant	Captain
Lieutenant (junior grade)	First Lieutenant
Ensign	Second Lieutenant

Fleet Admiral. The grade and rank of Fleet Admiral of the United States Navy was established by act of Congress in December 1944. This act permitted the appointment of four officers to this rank on the active list, three of whom were immediately appointed: Admiral William D. Leahy, USN (Ret.), Admiral Ernest J. King, USN, and Admiral Chester W. Nimitz, USN. The act which provides for the promotion of these officers is effective until six months after the termination of our present wars. (Admiral George W. Dewey held the rank of Admiral of the Navy by special act of Congress; however this rank lapsed after his death.) The equivalent grade in the Army to Fleet Admiral is General of the Army and four of the latter were appointed. General John J. Pershing's title is General of the Armies of the United States.

Commodore. Until 1862 all captains in the United States Navy commanding or having commanded squadrons, were recognized as commodore, though never commissioned as such. Commodore became a fixed rank in 1862, but was abandoned as a rank on the active list in 1899. In 1943 the rank of commodore was reestablished for temporary service in time of war or national emergency.

Flag officers. Naval officers of the rank of commodore and above are known as *flag officers*, each having the privilege of flying a personal flag on the ship or station to which he is attached. The flag has a blue field with white stars according to the rank of the officer concerned, 1 star designating a commodore; 2 stars, a rear admiral; 3 stars, a vice admiral; 4 stars, an admiral; and 5 stars, a fleet admiral.

Line and staff officers. Naval officers who are eligible to assume military command of ships or stations are designated *line officers*, being in *line of command*. All other officers are members of the several staff corps and are specialists in their various fields. At present there are six staff corps: Medical, Hospital, Dental, Chaplain, Supply, and Civil Engineer. (The Medical Corps consists entirely of physicians and surgeons; the Hospital Corps is made up of pharmacists, medical administrative officers, medical technologists, male nurses, etc.) While commissioned members of these corps have all the rights and privileges of their ranks, they are not eligible to assume command except in their own corps. They are known as *staff officers*, but should not be confused with line officers assigned to staffs of flag officers and certain other high-ranking officers.

3A3. Uniforms and insignia. Excluding dress uniforms, which are not required in wartime, there are three uniforms worn by naval officers: (1) service dress blues, (2) service dress whites, and (3) working uniforms. The forest-green winter working uniform is worn by naval aviators and chief petty officers designated as aviation pilots. They may be worn by other officers attached to aviation commands. The summer working uniform (gray and khaki) is authorized for all officers. Full details regarding uniforms and insignia are set forth in *Uniform Regulations*. The senior officer present prescribes the uniform of the day that shall be worn by the officers under his command.

An officer's rank is indicated by the gold sleeve stripes on the service dress blue uniform and by shoulder marks on the gray (khaki) and white uniform and on overcoats. (Frequent reference to the chart at the back of the book will be helpful in understanding the discussion of ranks and insignia which follows.) Above the stripes, all line officers wear a star, while staff officers wear the appropriate corps device as shown by the following table:

<i>Corps</i>	<i>Corps Device</i>
Medical Corps	Gold oak leaf with silver acorn in center
Hospital Corps	Gold caduceus
Dental Corps	Gold oak leaf with two silver acorns at the base
Chaplain Corps:	
Christian	Cross
Jewish	Tablets of the Ten Commandments with Star of David above
Supply Corps	Gold oak leaf of three branches with three acorns
Civil Engineer Corps	Four gold crossed oak leaves with two silver acorns

The stripes indicating officers' ranks are as follows:

Rank	Stripes
Fleet Admiral	One 2-inch stripe and four $\frac{1}{2}$ -inch stripes above
Admiral	One 2-inch stripe and three $\frac{1}{2}$ -inch stripes above
Vice Admiral	One 2-inch stripe and two $\frac{1}{2}$ -inch stripes above
Rear Admiral	One 2-inch stripe and one $\frac{1}{2}$ -inch stripe above
Commodore	One 2-inch stripe
Captain	Four $\frac{1}{2}$ -inch stripes
Commander	Three $\frac{1}{2}$ -inch stripes
Lieutenant Commander	Two $\frac{1}{2}$ -inch stripes and one $\frac{1}{4}$ -inch stripe between
Lieutenant	Two $\frac{1}{2}$ -inch stripes
Lieutenant (jg)	One $\frac{1}{2}$ -inch stripe and one $\frac{1}{4}$ -inch stripe above
Ensign	One $\frac{1}{2}$ -inch stripe

With the gray (or khaki) working uniform, because it is a summer uniform and the coat frequently is removed, officers wear pin-on devices on the shirt collar. Line officers wear the pin-on device indicating rank on both collar tips. Staff officers wear the pin-on device of rank on the right collar tip and a corps device on the left. The rank devices are given below. These are similar in form to rank devices worn by Army and Marine officers, but are somewhat smaller.

Rank	Pin-on rank device
Fleet Admiral	Five silver stars
Admiral	Four silver stars
Vice Admiral	Three silver stars
Rear Admiral	Two silver stars
Commodore	One silver star
Captain	Silver spread eagle
Commander	Silver oak leaf
Lieutenant Commander	Gold oak leaf
Lieutenant	Two silver bars
Lieutenant (jg)	One silver bar
Ensign	One gold bar

Two types of caps may be worn with officers' uniforms, the visored cap and the garrison cap. The *visored* cap has interchangeable tops of white, navy blue, or grey (khaki). The white top is worn either with the white or navy blue uniform; the navy blue top is worn with the blue uniform; and the grey (or khaki) top is worn with the summer working uniform. Cap covers, of oiled silk, are worn for protection against rain.

The visored cap gives no exact indication of rank. On caps worn by officers of the rank of lieutenant commander and below, the visor is black; captains' and commanders' visors are gold-embroidered in front; flag officers' caps bear full visor embroidery.

The *garrison* cap, which is worn when appropriate, may be either navy blue or grey (khaki). Insigne of rank is worn on the right side of the garrison cap, near the front, and a miniature form of the officers' cap device is worn on the left side.

Aiguillettes. Aiguillettes are worn by officers when on duty as personal aides to the President, as aides at the White House, aides to the Secretary and Assistant Secretary of the Navy, aides to flag officers, and by naval attachés. They

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may be worn on official occasions by commissioned officers appointed as aides on his staff by the governor of a State or Territory. Aides to the President and at the White House wear them on the right side; all others on the left. With overcoats they are worn on the outside.

Service aiguillettes consist of loops of aiguillette cord fastened on the shoulder and going around the shoulder just under the armpit. The aiguillette cord is gold with blue silk insertion. (Both the dress and undress aiguillettes for the aide to the President are made with gold cord without the blue silk insertion.) The number of loops are as follows:

- a. Aide to admiral or officer or official of higher rank: four loops.
- b. Aide to vice admiral: three loops.
- c. Aide to rear admiral or officer of lower rank entitled to an aide: two loops.

Dress aiguillettes consist of two single plaits of aiguillette cord with two loops. At the termination of the plaits there are approximately 3 inches of plain cord at the end of which are secured two gilt metal tags, approximately $3\frac{1}{2}$ inches long, mounted with two silver anchors. They are worn on service uniforms by aides on occasion of ceremony and on social occasions when prescribed.

Mourning badges. Mourning badges are worn by officers when prescribed and at no other time. They are of black crepe, three inches wide, and worn on the left sleeve of the outer coat, halfway between the shoulder and elbow.

3A4. Warrant and chief warrant officers. A *warrant* officer is a specialist. Generally he has a background of several years' naval experience, having started his career as an enlisted man.

Warrant officers' uniforms are similar to those of commissioned officers, except for caps and insignia. On the visored cap is a $\frac{1}{4}$ -inch gold chin-strap and a cap device consisting of crossed anchors. The sleeve marking on the blue uniform is a $\frac{1}{4}$ -inch gold stripe broken by blue every two inches. Above it, appears the device indicating the man's specialty, i.e., boatswain, gunner, etc. Such devices, embroidered in gold, are as follows:

<i>Warrant</i>	<i>Device</i>
Boatswain	Crossed fouled anchors
Gunner	Exploding bomb
Torpedoman	Torpedo
Electrician	Globe of the world
Radio Electrician	Bolts of lightning
Machinist	Propeller
Carpenter	Carpenter's square
Carpenter, CEC (Civil Engineer Corps, USNR)	Crossed oak leaves
Ship's Clerk	Crossed quills
Aerographer	Vertical arrow and wings
Photographer	Bellows of camera
Pharmacist	Caduceus
Pay Clerk	Three-branched oak leaf

Shoulder marks worn by warrant officers follow a similar pattern to that of the sleeve marking. The gold stripe, $\frac{1}{4}$ -inch in width, is broken in the center by blue; the device appears inboard. Pin-on devices in gold are worn on the collar

tips of the shirt of the working uniform and on both sides of the garrison cap.

Chief warrant officers actually are commissioned officers. Hence they rank above warrant officers and rank with, but after, ensigns. Their titles are similar to warrants' but are prefixed by the word *Chief*.

The chief warrant officer's uniform is similar to the commissioned officer's, with a few exceptions. Stripes on sleeves and shoulder marks are $\frac{1}{2}$ -inch in width but are broken with blue. The visored cap is the same as the commissioned officer's, and the garrison cap bears a miniature form of the officer's cap device on the left side and the corps device on the right side. However, on the garrison cap, and on the shirt-collar tips, the pin-on device is of silver.

3A5. Medals and other insignia. It is said that Alexander the Great, the General who at the ripe age of thirty-three ran out of worlds to conquer, began the custom of awarding medals for heroism on the battlefield more than 2,000 years ago. Thus there is a historic precedent for the medals now being earned by Americans all over the world. The bewildering array of little ribbons on the left breast of the dress uniform of veterans often seems quite puzzling to the newcomer in the Navy. These distinctive ribbons—and there are many of them—represent the medals which are too cumbersome to be worn at all times. They are worn in horizontal rows of three each, arranged in order of precedence from the center of the body to the left shoulder. (See Appendix A for fuller discussion; see also chart at the back of the book.)

These medals may be considered briefly under three headings:

1. *Personal awards.* Examples—The Navy Cross and the Distinguished Flying Cross. (Additional awards of these medals are indicated by stars.)

2. *Campaign and Service medals.* Examples—The Nicaraguan Campaign (1912), Victory Medal (First World War), American Defense Service Medal (service during the limited emergency from 8 September 1939 to declaration of war), and Asiatic-Pacific Area Campaign Medal of the present war. Major engagements in the area are indicated by bronze stars on the ribbon.

3. *Special qualification medals.* Examples—Rifle and Pistol Shot's medals.

Two other insignia should be noted: the submarine insigne consisting of a submarine flanked by dolphins, worn by officers who have qualified in submarines. Enlisted men qualified in submarines wear an embroidered distinguishing mark. Submarine combat insigne is worn by officers and enlisted personnel who have participated in successful combat patrols. Aircrew insigne is worn by all crew members (except the pilot) of a combat airplane.

3A6. United States Coast Guard. The distinguishing mark of all Coast Guard uniforms is the Coast Guard shield. This appears above the stripes on the sleeves and shoulder markings of commissioned officers; accompanies the specialty device on uniforms of warrant officers; and is worn on the right sleeve of the enlisted men's uniforms, being white on the blues and blue on the whites.

The eagle on the officer's cap device is of gold and is perched on a horizontal anchor. The shield, centered on the eagle's breast, is of silver.

Except for the presence of the shield on the uniforms and the difference in

the officer's cap device, Coast Guard uniforms are identical with those of the rest of the Navy.

There are no staff corps officers in the Coast Guard branch. All such duties are performed by the staff corps of the Navy.

3A7. Women's Reserve. The basic uniforms for personnel of the Women's Reserve, United States Naval Reserve, are the navy blue uniform, the white dress uniform (optional for enlisted women), and the grey and white pin-striped seersucker working uniform. All WAVES may be readily identified by a device consisting of a fouled anchor superimposed on a three-bladed propeller which is worn on the jacket lapels of these uniforms. The sleeve braid, indicating a WAVE officer's rank, is reserve blue in color on navy blue uniforms and navy blue on white and seersucker uniforms. Officers classified as (W) wear a matching star above the sleeve stripe, and staff corps officers wear the appropriate staff corps device. WAVE petty officers wear rating badges of the same design as those of enlisted men. The regulation officer's cap device is worn on the WAVE officer's hat. "U. S. Navy" in gilt letters on a navy blue cap ribbon marks the enlisted woman's hat. A garrison cap, styled for women, is optional for both officer and enlisted personnel of the Women's Reserve.

3A8. Navy Nurse Corps. Members of the Nurse Corps of the United States Navy are commissioned officers and hold ranks corresponding to those of other officers.

The working uniform is an ordinary nurse's white uniform and cap. Pin-on device of rank is worn on the right collar tip, and on the cap; rank is also shown by gold stripes against a broader band of black velvet. The dress uniform is blue or white; gold sleeve stripes are worn on the blue, and shoulder marks with gold stripes are worn on the white dress uniform and on the overcoat. The corps device appears above the stripes in both cases and is a gold fouled anchor with oak leaf and acorn placed diagonally across the shank. The cap device is similar to that of other commissioned officers. Recently a grey uniform, for off-duty wear, with matching garrison cap, has been authorized. Beige hose instead of black, are now worn with the blue uniform.

3A9. Midshipmen and reserve midshipmen. Midshipmen and reserve midshipmen are classified as officers of the line, but are officers only in a qualified sense. They rank between warrant officers and chief warrant officers. Their uniforms are similar to officers', but are slightly differentiated between the regulars and the reserves. Midshipmen USN, of the fourth class, wear clean sleeves. Second and third classmen wear one and two diagonal stripes, respectively, between the cuff and the elbow. First classmen wear a single horizontal stripe above the cuff. Shoulder marks match. Reserve midshipmen wear clean sleeves, and wear shoulder marks only on grey working uniforms. These grey shoulder marks have a fouled-anchor device and, optionally, black stripes denoting student officers and petty officers. Gold pin-on anchor insignia are worn on the coat-collar tips of the midshipman USN uniform, and gold fouled-anchor pin-on insignia are worn on the coat-collar tips of the reserve midshipman uniform.

3A10. Aviation cadets. Aviation cadets are student naval aviators, and rank between chief petty officers and warrant officers. Their uniforms are similar to officers', but with clean sleeves, and include garrison caps instead of caps of a visor type. They wear gold fouled-anchor pin-on insignia on coat-collar tips, and are distinguished in appearance from other student officer candidates by the Navy V-5 device worn on the left side front of the garrison cap.

3A11. Origin of officer's uniforms. Approximately as late as the middle of the eighteenth century, sailors' dress generally lacked uniformity. The well-known story of the British naval officers, who habitually sought a rendezvous at Will's Coffeehouse, explains the origin of the officers' uniform worn by the Royal Navy. In 1745, after much discussion, these officers drew up a petition and presented it to the Admiralty requesting a prescribed dress. Various patterns and colors were accordingly prepared for inspection. The final selection was made by the King himself. Having seen the Duchess of Bedford riding in a blue habit which greatly took his fancy, he designated that as the color to be adopted by the Royal Navy. An order issued in 1748 notified the fleet of this decision.

The United States Navy has always, to a large extent, adopted the practices of the Royal Navy. It is possible to trace, beginning with the adoption of the uniform in 1776 by the Marine Committee of the Continental Congress and continuing even to the present day, the similarity in the dress of the British and American navies. The Continental Navy, like the Royal Navy, went through debates on color, frills, and insignia to be used to lend the desired effect. No doubt, both countries had the same purpose in adopting a uniform; that is, it not only made it possible to distinguish rank, but it also improved the appearance and lifted the morale. It was in 1877 that our Navy adopted the single-breasted blouse with a high military collar. The present double-breasted coat was accepted in 1918. (During this period of the evolution of the uniform, the style of hair and beards also changed. In the eighteenth century, sailors wore a queue which extended in back like a marlinspike. At the time of the War Between the States and the Spanish-American War, a great variety of beards was worn both by officers and men. However, during the period of the War of 1812 and the First World War, our officers and men were, in the main, beardless.)

The first real attempt to regulate the chaplain's uniform came in 1830 when the chaplains were authorized to wear "a plain black coat, vest and pantaloons." At first the buttons were plain but in 1838 the Navy Department authorized the chaplains to wear the official eagle button. The regulations issued in 1841 introduced some radical changes which authorized the chaplains to wear practically the same uniform as that worn by the other naval officers. The chaplains wore the cross on their uniforms for the first time in 1863.

Two insignia which have for centuries been associated with the medical profession were early employed as the marks of the surgeon and surgeon's mate—the caduceus and the oak leaf with acorn. (The caduceus was the classic symbol of the Greek god of medicine; the oak leaf and acorn was the symbol of the

Druid physician-priests.) In the Dental Corps of the United States Navy the oak leaf and acorn is used, the arrangement of the acorn distinguishing it from the Medical Corps device.

In our Navy the Geneva cross, an ancient medical symbol dating from the Knights of Malta, has been adopted as the insignia of the enlisted personnel of the Medical Department. (This symbol is generally used to mark ambulances also.) Officers of the Hospital Corps wear the caduceus. Gold insignia to denote rank, and in the case of staff officers also their special branches, gradually came into use.

Since 1830 the United States Navy has employed the oak leaf to designate rank or corps. It is quite probable that this ornamental device symbolizes our famous oaken ships then in use.

Today, the qualities of comfort, service, and appearance mark the naval officer's uniform and, with the exception of full-dress attire, most frills have disappeared. It is also obvious that the British and American naval uniforms differ only in details of ornamentation and insignia.

B. ENLISTED PERSONNEL

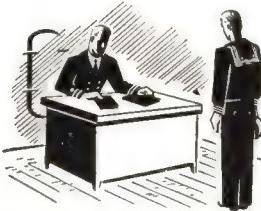
3B1. Path of advancement. The great number of specialty marks which may be worn by enlisted personnel makes the problem of identification one of ever-increasing complexity. Upon entering the service, while in the lowest pay grade, men are divided into four categories, but as they progress to petty officer ratings, the number of types increases to approximately fifty.

As an illustration of normal advancement, consider the following example. A man enlists as an apprentice seaman. After receiving basic training at "boot school," if he decides that he is more interested in the seaman branch, and if the needs of the service warrant, he becomes a seaman second class. Later he is advanced to seaman first class. Then a decision is made as to what petty officer rating he would like to attain. He will, of course, take into consideration the vacancies then existing on his ship. If, for example, he decides to become a gunner's mate, he begins assisting the gunner's mate and is said to be a "striker" for gunner's mate. If successful in his examinations, he gets the rating of gunner's mate third class (GM3c) and is now a "rated man." Note the confusing terminology: A man holds a rating of seaman 2c, but when he holds that rating he is a "non-rated" man; petty officers are often referred to as "ratings." Enlisted personnel are never said to hold rank; this term is restricted to officers.

From GM3c the man progresses to GM2c, thence to GM1c, and finally to chief gunner's mate. If he is an outstanding man, he can then be advanced further to the warrant officer rank of gunner and thence to chief gunner, the commissioned warrant officer rank.

From apprentice seaman to chief petty officer, the man has gone through seven pay grades. These correspond exactly with Army enlisted ratings as indicated at the top of page 42.

ENLISTED ADVANCEMENT



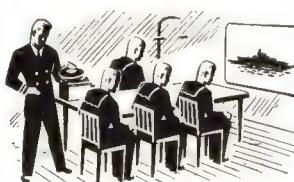
A The division training officer discusses plans with the man for completing the rate requirements when the training course is checked out.



B The training course must be read and re-read. Regular periods of study and good reading habits make for more rapid progress in advancement.



C Training in practical work with ship's gear is necessary for advancement in rating. This training is given the men by petty officers.



D In regularly scheduled classes, conducted by division training officers, trainees gain information and skills necessary for advancement.



E The men learn from each other in small study groups. These study groups are voluntary and are in addition to class meetings with instructors.



F Satisfactory application of practical factors is required knowledge for advancement in rate. Training employs actual practice with ship's gear.



G The candidate is called before the Examining Board consisting of three officers and is graded on requirements. Records are kept on results.



Figure 7.

NAVAL ORIENTATION

<i>Pay grade</i>	<i>Navy</i>	<i>Army</i>
1st	CGM	master sergeant (or 1st sgt)
2nd	GM1c	technical sergeant
3rd	GM2c	staff sergeant
4th	GM3c	sergeant
5th	S1c	corporal
6th	S2c	private, first class
7th	AS	private

The 7th pay grade in the Navy consists almost entirely of apprentice seamen, the few exceptions being men who enter the steward's branch and are known as steward's mates third class. The 6th pay grade, however, contains seamen 2c, steward's mates 2c, hospital apprentices 2c, buglers 2c, and firemen 2c. The 5th pay grade contains seamen 1c, steward's mates 1c, hospital apprentices 1c, buglers 1c, and firemen 1c. From this point, the seamen, firemen, hospital apprentices, buglers, and steward's mates strike for ratings.

3B2. Petty officer ratings. The following is a general list of the petty officer ratings, their insignia, the various pay grades of the rate, and abbreviations:

Enlisted Ratings

RATINGS	INSIGNIA	PAY GRADES	ABBREVIA-TION
<i>Seaman Branch:</i>			
Chief Boatswain's Mate	crossed anchors	4	CBM*
Boatswain's Mate, 1c	crossed anchors	3	BM1c*
Boatswain's Mate, 2c	crossed anchors	2	BM2c*
Coxswain	crossed anchors	1	Cox
Boatswain's Mate A, ¹ 2c, 1c, Chief	crossed anchors	3-1	BMA
Turret Captain, 1c, Chief	turret	2-1	TC
Gunner's Mate, 3c, 2c, 1c, Chief	crossed guns	4-1	GM
Mineman, 3c, 2c, 1c, Chief	floating mine	4-1	MN
Torpedoman's Mate, 3c, 2c, 1c, Chief	torpedo	4-1	TM
Torpedoman's Mate E, ² 3c, 2c, 1c, Chief	torpedo	4-1	TME
Quartermaster, 3c, 2c, 1c, Chief	wheel	4-1	QM
Signalman, 3c, 2c, 1c, Chief	crossed signal flags	4-1	SM
Fire Controlman, 3c, 2c, 1c, Chief	range finder	4-1	FC
Fire Controlman O, ³ 3c, 2c, 1c, Chief	range finder	4-1	FCO
Fire Controlman S, ⁴ 3c, 2c, 1c, Chief	range finder	4-1	FCS
Seaman, 1c		5	S1c
Seaman, 2c		6	S2c
Apprentice Seaman		7	AS
<i>Artificer Branch:</i>			
Radioman, 3c, 2c, 1c, Chief	bolts of lightning	4-1	RM
Radio Technician, 3c, 2c, 1c, Chief	bolts of lightning	4-1	RT
Radarman, 3c, 2c, 1c, Chief	arrow through bolts of lightning	4-1	RdM
Sonarman, 3c, 2c, 1c, Chief	arrow and earphones	4-1	SoM
Sonarman H, ⁵ 3c, 2c, 1c, Chief	arrow and earphones	4-1	SoMH
Carpenter's Mate, 3c, 2c, 1c, Chief	crossed axes	4-1	CM
Shipfitter, 3c, 2c, 1c, Chief	crossed hammers	4-1	SF
Metalsmith, 3c, 2c, 1c, Chief	crossed hammers	4-1	M
Molder, 3c, 2c, 1c, Chief	crossed hammers	4-1	M!
Pattentmaker, 3c, 2c, 1c, Chief	crossed axes	4-1	PM
Special Artificer I, ⁶ 3c, 2c, 1c, Chief	caliper	4-1	SAI

See footnotes at end of table.

Enlisted Ratings

RATINGS	INSIGNIA	PAY GRADES	ABBREVIATION
Special Artificer O, ⁷ 3c, 2c, 1c, Chief	caliper	4-1	SAO
Special Artificer D, ⁸ 3c, 2c, 1c, Chief	caliper	4-1	SAI
Painter, 3c, 2c, 1c, Chief	crossed axes	4-1	Ptr
Telegrapher, 3c, 2c, 1c, Chief	bolts of lightning	4-1	T
<i>Artificer Branch—Engine Room Force:</i>			
Machinist's Mate, 3c, 2c, 1c, Chief	3-bladed screw	4-1	MM
Machinist's Mate G, ⁹ 3c, 2c, 1c, Chief.	3-bladed screw	4-1	MMG
Machinist's Mate R, ¹⁰ 3c, 2c, 1c, Chief.	3-bladed screw	4-1	MMR
Machinist's Mate S, ¹¹ 3c, 2c, 1c, Chief.	3-bladed screw	4-1	MMS
Motor Machinist's Mate, 3c, 2c, 1c, Chief.	MO on 3-bladed screw	4-1	MoMM
Electrician's Mate, 3c, 2c, 1c, Chief	globe	4-1	EM
Water Tender, 3c, 2c, 1c, Chief.	3-bladed screw	4-1	WT
Boilermaker, 3c, 2c, 1c, Chief	3-bladed screw	4-1	B
Fireman, 1c		5	F1c
Fireman, 2c		6	F2c
<i>Aviation Branch:</i>			
Aviation Pilot, 2c, 1c, Chief	wings, shield and anchor	3-1	AP
Aviation Machinist's Mate, 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMM
Aviation Machinist's Mate C, ¹² 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMMC
Aviation Machinist's Mate F, ¹³ 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMMF
Aviation Machinist's Mate H, ¹⁴ 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMMH
Aviation Machinist's Mate I, ¹⁵ 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMMI
Aviation Machinist's Mate P, ¹⁶ 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMMP
Aviation Machinist's Mate T, ¹⁷ 3c, 2c, 1c, Chief.	wings and propeller	4-1	AMMT
Aviation Electrician's Mate, 3c, 2c, 1c, Chief.	wings and globe	4-1	AEM
Aviation Boatswain's Mate, 3c, 2c, 1c, Chief.	wings and crossed anchors	4-1	ABM
Aviation Radioman, 3c, 2c, 1c, Chief	wings and bolts of lightning	4-1	ARM
Aviation Radio Technician, 3c, 2c, 1c, Chief.	wings and bolts of lightning	4-1	ART
Aviation Metalsmith, 3c, 2c, 1c, Chief.	wings and crossed hammers	4-1	AM
Aviation Ordnanceman, 3c, 2c, 1c, Chief.	wings and exploding bomb	4-1	AOM
Aviation Ordnanceman T, ¹⁸ 3c, 2c, 1c, Chief.	wings and exploding bomb	4-1	AOMT
Aviation Fire Controlman 3c, 2c, 1c, Chief.		4-1	AFC
Airship Rigger, 3c, 2c, 1c, Chief	wings, anchor, blimp	4-1	AR
Parachute Rigger, 3c, 2c, 1c, Chief	wings and parachute	4-1	PR
Aerographer's Mate, 3c, 2c, 1c, Chief.	wings and vertical arrow	4-1	AerM
Photographer's Mate, 3c, 2c, 1c, Chief.	camera	4-1	PhoM
Torpedoman's Mate V, ¹⁹ 3c, 2c, 1c, Chief.	torpedo	4-1	TMV
Painter V, ²⁰ 3c, 2c, 1c, Chief	crossed axes	4-1	PtrV
Storekeeper V, ²¹ 3c, 2c, 1c, Chief	crossed keys	4-1	SKV
<i>Special Branch:</i>			
Yeoman, 3c, 2c, 1c, Chief	crossed quills	4-1	Y

See footnotes at end of table.

NAVAL ORIENTATION

Enlisted Ratings

RATINGS	INSIGNIA	PAY GRADES	ABBREVIATION
Storekeeper, 3c, 2c, 1c, Chief.....	crossed keys	4-1	SK
Storekeeper D, ²⁰ 3c, 2c, 1c, Chief.....	crossed keys	4-1	SKD
Storekeeper T, ²¹ 3c, 2c, 1c, Chief.....	crossed keys	4-1	SKT
Printer, 3c, 2c, 1c, Chief.....	open book	4-1	Prtr
Printer L, ²² 3c, 2c, 1c, Chief.....	open book	4-1	PrtrL
Printer M, ²³ 3c, 2c, 1c, Chief.....	open book	4-1	PrtrM
Ship's Service Man B, ²⁴ 3c, 2c, 1c, Chief.	crossed key and quill	4-1	SSMB
Ship's Service Man C, ²⁵ 3c, 2c, 1c, Chief.	crossed key and quill	4-1	SSMC
Ship's Service Man T, ²⁶ 3c, 2c, 1c, Chief.	crossed key and quill	4-1	SSMT
Ship's Service Man L, ²⁷ 3c, 2c, 1c, Chief.	crossed key and quill	4-1	SSML
Pharmacist's Mate, 3c, 2c, 1c, Chief.....	red cross	4-1	PhM
Hospital Apprentice, 2c, 1c.....	red cross	6-5	HA
Musician, 3c, 2c, 1c, Chief.....	lyre	4-1	Mus
Buglemaster, 3c, 2c, 1c, Chief.....	bugle	4-1	Bgmstr
Bugler, 2c 1c	bugle	6-5	Bug
Mailman, 3c, 2c, 1c, Chief.....	circled M flanked by block of 4 horizontal lines	4-1	MaM
<i>Commissary Branch:</i>			
Chief Commissary Steward	crossed keys and feather	1	CCS
Ship's Cook, 3c, 2c, 1c, Chief.....	crescent	4-1	SC
Ship's Cook B, ²⁸ 3c, 2c, 1c, Chief.....	crescent	4-1	SCB
Baker, 3c, 2c, 1c.....	crescent	4-2	Bkr
<i>Steward's Branch:</i>			
Steward, 3c, 2c, 1c, Chief.....	crescent	4-1	St
Cook, 3c, 2c, 1c, Chief.....	crescent	4-1	Ck
Steward's Mate, 3c, 2c, 1c.....	crescent	7-5	StM
<i>Specialists†:</i>			
Specialist, 3c, 2c, 1c, Chief.....	diamond with letter	4-1	Sp (²⁹)
<i>Construction Battalions††:</i>			
Boatswain's Mate (CB)	crossed anchors	4-1	BM (CB)
(Boatswain), 3c, 2c, 1c, Chief.	crossed anchors	4-1	BM (CB)
Boatswain's Mate (CB) (Stev-dore), 3c, 2c, 1c, Chief.	crossed anchors	4-1	CM (CB)
Carpenter's Mate (CB) (Builder), 3c, 2c, 1c, Chief.	crossed axes	4-1	CM (CB)
Carpenter's Mate (CB) (Drafts-man), 3c, 2c, 1c, Chief.	crossed axes	4-1	CM (CB)
Carpenter's Mate (CB) (Surveyor), 3c, 2c, 1c, Chief.	crossed axes	4-1	CM (CB)
Chief Carpenter's Mate (CB) (Excavation Foreman).	crossed axes	1	CCM (CB)
Electrician's Mate (CB) (General), 3c, 2c, 1c, Chief.	globe	4-1	EM (CB)
Electrician's Mate (CB) (Commu-nication), 3c, 2c, 1c, Chief.	globe	4-1	EM (CB)
Electrician's Mate (CB) (Drafts-man), 3c, 2c, 1c, Chief.	globe	4-1	FM (CB)
Electrician's Mate (CB) (Line and Station), 3c, 2c, 1c, Chief.	globe	4-1	EM (CB)
Gunner's Mate (CB) (Armorer), 3c, 2c, 1c, Chief.	crossed guns	4-1	GM (CB)
Gunner's Mate (CB) (Powderman), 3c, 2c, 1c, Chief.	crossed guns	4-1	GM (CB)
Machinist's Mate (CB) (Equipment Operator), 3c, 2c, 1c, Chief.	3-bladed screw	4-1	MM (CB)
Shipfitter (CB) (Blacksmith), 3c, 2c, 1c.	crossed hammers	4-2	SF (CB)
Shipfitter (CB) (Mechanical Draftsman), 3c, 2c, 1c, Chief.	crossed hammers	4-1	SF (CB)

See footnotes at end of table.

Enlisted Ratings

RATINGS	INSIGNIA	PAY GRADES	ABBREVIATION
Shipfitter (CB) (Pipefitter and Plumber), 3c, 2c, 1c, Chief.	crossed hammers	4-1	SF (CB)
Shipfitter (CB) (Rigger), 3c, 2c, 1c, Chief.	crossed hammers	4-1	SF (CB)
Shipfitter (CB) (Steelworker), 3c, 2c, 1c, Chief.	crossed hammers	4-1	SF (CB)
Shipfitter (CB) (Welder), 3c, 2c, 1c.	crossed hammers	4-2	SF (CB)
Storekeeper (CB) (Stevedore), 3c, 2c, 1c, Chief.	crossed keys	4-1	SK (CB)
Water Tender (CB), 3c, 2c, 1c, Chief.	3-bladed screw	4-1	WT (CB)

*Abbreviations for all ratings are formed similarly.

In the Aviation Branch, the rating of Chief is formed by inserting "C" after the "A" indicating Aviation.

For example: Aviation Machinist's Mate, Chief, is ACMM.

†Ratings not authorized for personnel in the regular Navy and Fleet Reserves. In the case of men of the insular force, the abbreviations will be the same as the corresponding rating in the regular Navy, preceded by "Nat."

††All men assigned to the Construction Battalions wear the standard insignia for their rate plus the CB shoulder insignia. The general service rates who are serving with the Construction Battalions wear the CB shoulder insignia while so serving.

¹A—Master at Arms

²E—Electrical

³O—Operator

⁴S—Submarine

⁵H—Harbor Defense

⁶I—Instruments

⁷O—Optical

⁸D—Special Devices (synthetic training)

⁹G—Industrial Gas Generating Mechanic

¹⁰R—Refrigeration Mechanic

¹¹S—Shop Machinist

¹²C—Aviation Carburetor Mechanic

¹³F—Aviation Flight Engineer

¹⁴H—Aviation Hydraulic Mechanic

¹⁵I—Aviation Instrument Mechanic

¹⁶p—Aviation Propeller Mechanic

¹⁷T—Gas Turbines

¹⁸T—Aviation Turret Mechanic

¹⁹V—Assigned to Aviation Activities

²⁰D—Disbursing Storekeeper

²¹T—Technical Storekeeper

²²L—Lithographer

²³M—Multilith Operator

²⁴B—Barber

²⁵C—Cobbler

²⁶T—Tailor

²⁷L—Laundryman

²⁸B—Butcher

²⁰Insert letter indicating specialty:

(A) Physical Instructor

(R) Recruiter

(C) Classification Interviewer

(S) Shore Patrol; Personnel Supervisor

(F) Fire Fighter

(T) Teacher

(G) Special Gunnery Instructor (Aviation)

(V) Transport Airman

(I) Operator (Electrical Accounting Machine)

(W) Chaplain's Assistant

(M) Mail

(X) Essential Specialists, as yet unclassified. Includes draftsman, cartographer, plastics expert, telephone switchboard operator supervisors, etc.

(O) Ordnance Material Inspector

(Y) Control-Tower Operators

(P) Photographic Specialist

(Q) Communication Specialist

All ratings in the seaman branch, the artificer branch, the aviation branch, and the commissary branch are normally achieved after being S1c; the pharmacist's mates go through HA2c and HA1c from apprentice seamen. Engineer force artificers first hold the F2c and F1c ratings, and rated men of the steward's branch first are steward's mates.

Warrant

Achieved from

boatswain	any rating of the seaman branch
gunner	gunner's mate, torpedoman's mate, turret captain, fire controlman, aviation ordnanceman
torpedoman	torpedoman's mate
electrician	electrician's mate
radio electrician	radioman, aviation radioman, radio technician, radarman, sonarman
machinist	artificer branch engine room forces, aviation pilot, aviation machinist's mate
carpenter	any rating of the artificer branch or aviation metalsmith
ship's clerk	yeoman
aerographer	aerographer's mate
photographer	photographer's mate
pharmacist	pharmacist's mate
pay clerk	any branch (most commonly from storekeeper)

NORMAL PATH OF ADVANCEMENT

SEAMAN BRANCH

APPRENTICE SEAMAN	Cox	BM 2c	BM 1c	CBM
	*	BMA2c	BMA1c	CBMA
SEAMAN, SECOND CLASS	GM 3c	GM 2c	TC 1c	CTC
SEAMAN, FIRST CLASS	GM 3c	GM 2c	GM 1c	CGM
	MN 3c	MN 2c	MN 1c	CMN
	TM 3c	TM 2c	TM 1c	CTM
	TME 3c	TME 2c	TME 1c	CTME
	QM 3c	QM 2c	QM 1c	CQM
	SM 3c	SM 2c	SM 1c	CSM
	FC 3c	FC 2c	FC 1c	CFC
	FCO 3c	FCO 2c	FCO 1c	CFCO
	FCS 3c	FCS 2c	FCS 1c	CFCS

ARTIFICER BRANCH, Engine Room Force

APPRENTICE SEAMAN	MM 3c	MM 2c	MM 1c	CMM
	MMG 3c	MMG 2c	MMG 1c	CMMG
	MMR 3c	MMR 2c	MMR 1c	CMMR
	MMS 3c	MMS 2c	MMS 1c	CMMS
	Mo MM 3c	Mo MM 2c	Mo MM 1c	CMOMM
	EM 3c	EM 2c	EM 1c	CEM
	WT 3c	WT 2c	WT 1c	CWT
	B 3c	B 2c	B 1c	CB

AVIATION BRANCH

APPRENTICE SEAMAN	AP 2c	AP 1c	CAP	
	ABM 3c	ABM 2c	ABM 1c	ACBM
SEAMAN, SECOND CLASS	AMM 3c	AMM 2c	AMM 1c	ACMM
SEAMAN, FIRST CLASS	AMMC 3c	AMMC 2c	AMMC 1c	ACMMC
	AMMF 3c	AMMF 2c	AMMF 1c	ACMMF
	AMMH 3c	AMMH 2c	AMMH 1c	ACMMH
	AMMI 3c	AMMI 2c	AMMI 1c	ACMMI
	AMMP 3c	AMMP 2c	AMMP 1c	ACMMP
	AMMT 3c	AMMT 2c	AMMT 1c	ACMTT
	AEM 3c	AEM 2c	AEM 1c	AEEM
	ARM 3c	ARM 2c	ARM 1c	ACRM
	ART 3c	ART 2c	ART 1c	ACRT
	AM 3c	AM 2c	AM 1c	ACM
	AOM 3c	AOM 2c	AOM 1c	ACOM
	AFC 3c	AFC 2c	AFC 1c	ACFC
	ADMT 3c	ADMT 2c	ADMT 1c	ACOMT
	AR 3c	AR 2c	AR 1c	CAR
	PR 3c	PR 2c	PR 1c	CPR
	AERM 3c	AERM 2c	AERM 1c	CAERM
	PHOM 3c	PHOM 2c	PHOM 1c	C PHOM
	TMV 3c	TMV 2c	TMV 1c	CTMV
	PTRV 3c	PTRV 2c	PTRV 1c	CPTRV
	SKV 3c	SKV 2c	SKV 1c	CSKV

The rating of AP 2c is retained for disciplinary action
Designated AP is after completion of pilot training.

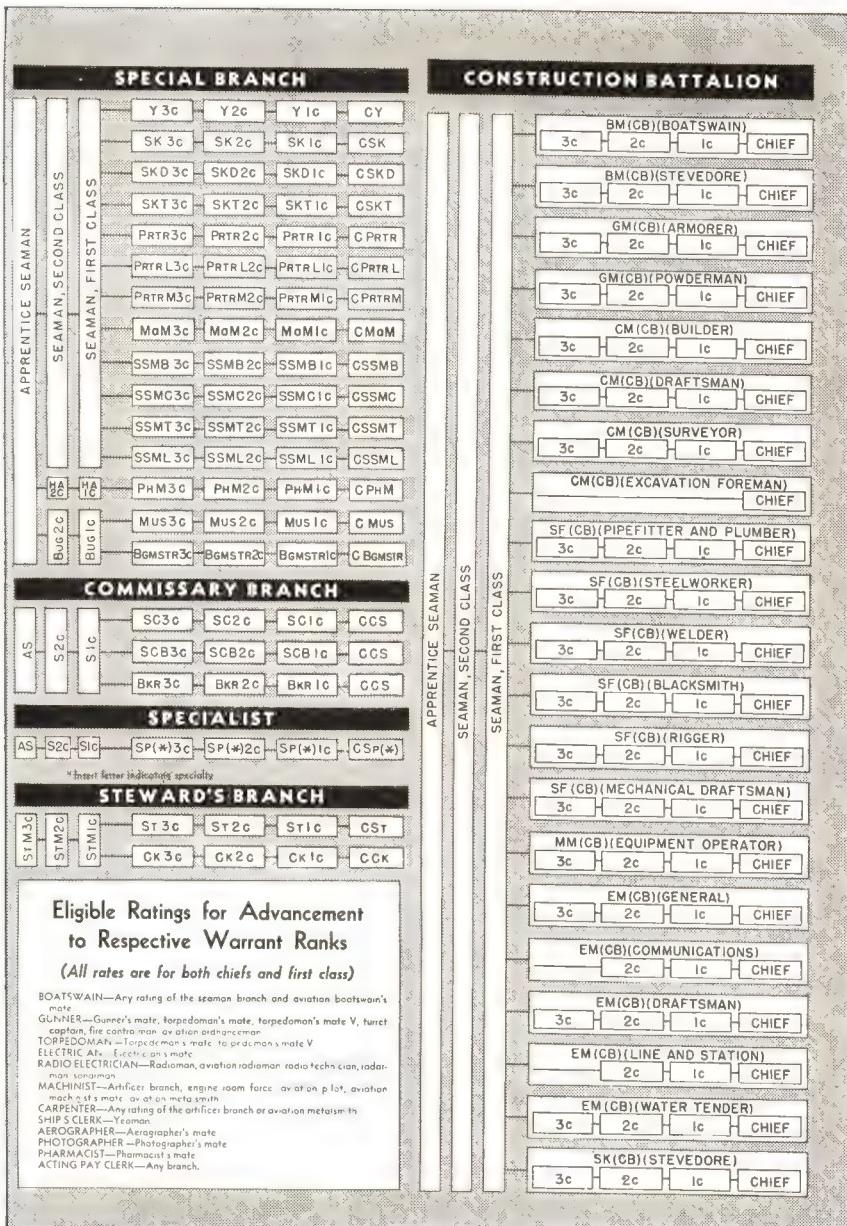


Figure 8.

3B3. Uniforms. Three distinctive uniforms are worn by enlisted personnel.
(1) The characteristic bluejacket's uniform, in blue or white, with jumper and 13-button bell-bottom trousers (in blues) is worn by all non-rated men and by all petty officers below chief petty officers. (Men in steward's branch ratings in pay grades 4, 3, 2, and 1 do not wear the characteristic bluejacket's uniform.)
(2) The chief petty officer's uniform is similar to those worn by commissioned officers except that the blues have sets of 8 buttons instead of 6. Also no shoulder marks are worn on the greys or khakis, and the whites are cut like the blue uniforms (with 8 buttons) instead of the high collar type. Insignia differ considerably.
(3) All men in the steward's branch, except steward's mates, wear a uniform similar to the chief petty officer's.

Head covering worn by the bluejackets is the typical sailor hat in white or the blue flat-topped one (no visor) with band reading US Navy. In time of peace, the name of the bluejacket's ship appears on this band. The chief petty officer wears a visor cap of the officer-type but the chin strap is shiny black and the insignia is a fouled anchor with USN across it. Chief petty officers also wear garrison caps with the miniature anchor USN device pinned to the right side. The chief cook's and chief steward's cap is the same as the chief petty officer's visor cap. The cook's or steward's cap is also the same as the chief petty officer's visor cap except that the insignia is USN without the anchor, and the buttons on the chin strap are black.

3B4. Insignia. An apprentice seaman or steward's mate, 3c, wears a cuff marking of a single 3/16-inch white stripe on the service dress blues. The S2c, F2c, HA2c, and StM2c wear two stripes on the cuffs and S1c, F1c, HA1c and StM1c wear three stripes. The three stripes are also worn by all petty officers except chief petty officers.

Non-rated men of the seaman branch wear a "branch mark" (formerly "watch mark") which is a $\frac{3}{8}$ -inch stripe extending around the right arm at the shoulder seam. It is white on blues and blue on whites. Likewise the non-rated men of the engine room force of the artificer branch wear the red branch mark on the left shoulder. HA2c and HA1c wear a distinguishing red cross halfway between the shoulder and elbow on the left sleeve, but this is not called a "branch mark." Non-rated men of the steward's branch have no distinguishing branch marks.

A rating badge is worn by all petty officers including chief petty officers. It consists of an eagle, an embroidered insignia indicating a specialty, and chevrons which are V-shaped with the point down. One chevron denotes a PO3c, two a PO2c, three a PO1c, and three with a half circle enclosing the top denotes a CPO. The rating badge is red on blue uniforms and blue on the whites. Petty officers of the seaman branch, and they alone, wear the rating badge on the right upper arm, and these ratings are commonly called "right arm ratings." All other badges are worn on the left upper arm.

Specialty marks are worn as part of the rating badge of petty officers, and without rating badges in certain other non petty officer ratings. Non-rated men

who have successfully completed the full course of instruction at a Class "A" service school, except basic engineering, wear the specialty mark of the rating for which the school is established, *halfway between the shoulder and elbow* on the right or left sleeve, as prescribed for the badge of the rating. Non-rated men who have successfully passed the required examinations for petty officer, third class, wear the specialty mark of the ratings for which qualified, *halfway between the shoulder and the elbow* of the right or left sleeve as prescribed for the badge of the rating.

Service stripes ("hash marks") are diagonal stripes, $\frac{3}{8}$ -inch wide and 7 inches long, worn on the left lower arm, each representing 4 years of Navy service. (Fleet Reserve service counts.) They are red on blue uniforms and blue on whites, khakis, or greys. The "hash marks" may be worn in gold by a man who has been awarded three consecutive good conduct awards (an award is worn by a man for each four year's active service with good conduct). When gold hash marks are worn, the rating badge of gold chevrons, silver eagle, and silver specialty marks should be worn, if available.

Certain distinguishing marks may be worn by men who have special qualifications or who have won certain distinctions. These include:

1. Gun captains, who wear a gun design on the sleeve.
2. Men in submarine service who wear embroidered submarine insignia.
3. Men in airship duty who wear an airship design on the sleeve.
4. The Navy E which is worn by enlisted men in the gunnery department for efficiency awards in gunnery; by enlisted men in the engineering department for efficiency awards in engineering; and by enlisted men in the communications department for efficiency awards in communications.
5. Sharpshooters who wear a bull's eye with a single ring.
6. Expert riflemen who wear medals and ribbons.
7. Divers who wear design of diving hood. Types differ for various grades.
8. Seaman gunners who wear exploding bomb on sleeve.
9. Strikers who may wear the specialty mark of the rating for which they are striking.

It should be remembered that *no* watch chains, fobs, pins, or other jewelry should be worn exposed upon the uniform by officer or enlisted personnel of the Navy, except sleeve buttons or shirt studs as prescribed, and authorized decorations, medals, and ribbons.

C. ORIGIN OF UNIFORM ORNAMENTS

3C1. General. The uniform of the bluejacket of today, although distinctive in its details in each of the navies of the world, has a general form which is more or less common to all. This form is the result of years of custom, and had its origin in reasons of utility. The sailors of the American Navy of 1776 had no official uniform and there was nothing before 1852 to prevent the seaman from ornamenting his costume in any way he fancied.

3C2. Collar on the jumper. The old salt of sailing ship days wore his hair braided into a pigtail and "clubbed" or doubled up into a knot and tied at the back of his neck, or possibly, neatly done up in an eel skin. No doubt a shampoo was unheard of, and the hair became naturally oily. To protect the uniform from being stained by the oil from his pigtail, the bluejacket added a square, washable collar to his jumper. This collar was often ornamented according to the personal taste of the man who wore it. Sailors have from time immemorial been fond of ornamentation, and fanciful designs appeared on the collars of their jackets in the early days. Possibly, some individual acquired the habit of adorning his uniform with tape around the outer edge of the collar; the style was admired by others and gradually spread until it has become a regulation accepted by most navies. The practice of sewing three rows of tape on the collar was no doubt selected for decorative effect and has no special significance, tradition to the contrary notwithstanding. It had not, as has been often explained, its origin in any desire to commemorate the three famous sea victories of Great Britain's Lord Nelson. The two stars on the collar appear to have no symbolism. They have been on most uniform jumpers since 1820.

3C3. Tapes on the wrist. The tapes which bind the wrists of the jumper are but a natural adaptation of the tapes which bound the collar. The regulation of requiring apprentice seamen to wear one tape; seamen second class, two; and seamen first class, three; is a later adaptation in our Navy.

3C4. Neckerchiefs. In "pigtail" days, no doubt the black neckerchief was used in an attempt to maintain some semblance of cleanliness. Hence, it was worn around the neck, thus protecting the collar of the shirt or jumper. The pigtails were greasy, and black concealed the dirt. Possibly, the neckerchief was used in the capacity of a sweat rag as well, since it was also worn around the forehead. As was done on the H.M.S. *Berwick* in 1794 at the time of the Captain's death, so at Nelson's funeral, the crew probably cut black neckerchiefs in two and wore them in mourning, one half around the arm, the other half around the hat. The tradition, that the black neckerchief was worn for the first time at Nelson's funeral and has since been adopted in commemoration of this great leader, is not based on fact. Silk ties, usually black, were worn by enlisted men in the United States Navy as early as 1776. The black silk neckerchief has been officially a part of the uniform of the enlisted men since 1852 at which time the first comprehensive uniform regulations for enlisted men were issued.

3C5. Bell-bottom trousers. These were probably so cut for two reasons—both excellent ones. First it was much easier with the bell-bottoms to roll up the trousers when washing down decks or working in wet weather; second, if, by chance, a sailor found himself overboard it was much easier to kick these hampering garments from his legs, if the bottoms were wide. The square flap which is buttoned in front at the waistband was also designed in such a way as to enable a man overboard to remove his trousers quickly. With one quick yank the flap could be torn loose. If there is any significance in the number of buttons—thirteen, it has never been officially explained.

3C6. Cap ribbons. The inclusion, in the uniform, of cap ribbons was more for the pleasure of personal adornment than for any reason of utility. The addition, in peacetime, of the name of the ship in letters of gold, is of later origin, but has become standard practice in nearly all navies. The United States Navy long ago did away with long, flowing cap ribbons, and tied them to form a bow on the left side.

3C7. Purpose of uniform. The uniform promotes a feeling or state of unity, while adding smartness to the appearance of an individual or a group. It serves to point out a friend or enemy. Insignia worn according to regulations upon the uniform indicate corps, rank, rate, and specialty as well as other distinguishing features, such as awards, campaign ribbons, and service stripes. Furthermore, the uniform makes it possible to discriminate readily the position of a superior, thus facilitating the rendition of correct recognition.

It would be fitting, in closing this chapter, to quote from a recent address delivered to a group of midshipmen at their graduation:

"Have an exalted pride in the uniform you wear and all that it represents. Wear it correctly; wear it proudly. Salute it with respect when you meet it; behave in it in a seemly manner; protect it when it is offended or in danger. It represents the fleet, the nation, your home, and your family. It is a symbol of all that is dear to you and of all that men are willing to die for."

4

DISCIPLINE

A. IMPORTANCE OF DISCIPLINE

4A1. The meaning of discipline. To the average person the word "discipline" carries with it the connotation of severity, an unreasonable curtailment of freedom, unnecessary restraints on personal conduct, endless restrictions, and compliance with arbitrary or unreasonable demands of authority. Actually, discipline is the basis of true democracy; for without depriving the individual of his fundamental rights, it nevertheless requires adherence to a set of rules which man, through the experience of the ages, has found best suited to govern relations between individual members of society. Some of these rules are made by duly constituted authority and are laid down in writing. These are called *laws*. Others have been sanctioned by custom and usage, and are called *conventions*. Everyone is subject to some sort of discipline.

Discipline is therefore not peculiar to nor limited to military organizations. It is present to a greater or less extent in any civilized society. No business, certainly no manufacturing activity, could operate without it. We are subjected every day to the discipline of police regulations, sanitary rules, even to the inexorable laws of nature. The desirable and happy citizen is one who has a healthy and proper concept of discipline.

Discipline implies subjection to a control exerted for the good of the whole, the adherence to rules or policies intended for the orderly coordination of effort. Obviously, discipline is indispensable to a military organization, for without it, an organization otherwise military becomes merely a mob. Hence, one of the primary responsibilities of a leader is the inculcation of discipline.

The purpose of discipline is to bring about uniformity in cooperating for the attainment of a common goal. This uniformity can be obtained when the individual understands how to fashion his interests to fit into the organization as a whole. Discipline rightly viewed is a character builder rather than a destroyer of individuality. Consequently, discipline develops teamwork among a crew and causes each man to pull his weight in the boat under all conditions of storm or action, despite congested living conditions and the complex nature of modern marine equipment.

An efficient military organization comprises a body of human beings trained and disciplined to concerted action; understanding one another through the sharing of common knowledge; and bound together by a unity of will and interest which is expressed by their willingness to follow and be obedient to their leader. A group, so organized, is effective not only for the specific purpose

intended, but for almost any emergency. Thus, a turret crew may readily be converted into a repair gang for carrying out an essential job within its capabilities. A company of midshipmen may readily be turned into a fire-fighting organization.

Actually, discipline is difficult to define. However, its fruits are manifested in a smart salute, in proper donning of the uniform, in prompt and correct action in an emergency, or in the battle efficiency that licked the submarines, captured the Marshalls and Gilberts, and raised havoc at Truk. Readiness is an earmark of the disciplined man or organization.

The well-disciplined naval unit responds automatically to an emergency and is not subject to panic. An incident in the first World War will illustrate this point.

Two sister ships lay in adjoining anchorages. One was known as a "taut ship." Her executive officer recognized the value of proper organization, discipline, and training. The first few months of his administration had been difficult to be sure, but gradually the ship fell into line, the crew cohered as a unit, and it became easier to do things the right way.

Her sister ship lying nearby was an example of the opposite. Her decks were dirty, her crew was slovenly and careless in salutes, her records were cluttered with courts-martial.

It was nearly midnight and the tide was running out strongly against the wind, making a nasty chop. A motor launch from the slack ship was bucking the sea, her liberty party huddled up in the bow under a tarpaulin. The coxswain had ordered the men to distribute their weight farther aft, but their concept of obedience was in keeping with their ship. In the blackness the launch struck a channel buoy, capsized, and sank almost immediately.

On the first ship, shrill cries were heard coming from the dark waters. All her boats were hoisted, and her entire crew except the anchor watch had turned in. But at the first cry for help, the words "Man overboard!" rang through the ship. The ship's organization had provided that a man be on the lookout and he was. Men and officers came promptly from their quarters in pajamas, underwear, or anything within reach. Three boats reached the water almost simultaneously, and by the time they were away, the searchlights had been manned and were playing over the water. Before the tide could sweep the victims away, sixteen men from the liberty boat had been saved.

Meanwhile, what was happening on the second ship? No one knows exactly. Perhaps the officer of the deck was engaged in some duty on the far side of the deck; perhaps he had stepped below for a moment. Whatever the facts, the second ship did nothing until the lifeboat from the first ship hailed it in passing in its search for survivors. Whereupon, the officer of the deck innocently inquired about the excitement. The reply of the lifeboat coxswain (who happened to be the executive officer of the first ship) unfortunately has not been preserved in the records. Sixteen men owed their lives not to their shipmates, but to the hard-earned discipline of the crew of their sister ship.

So far as the Navy is concerned, the desired goal is that quality of discipline, the components of which are respect for leaders, confidence in justice and fairness, and the compulsion of moral force. Discipline based on force alone cannot endure. *Lasting discipline must be induced.* True discipline is the inculcation of loyalty and intelligent initiative. Blind and unthinking obedience, mechanical response to specific commands, has no place in the military organization of today.

Punishment is not personal; it is not vindictive; it is not inflicted as revenge for misconduct; nor can it serve to right the wrong that has resulted from an act of dereliction. A young officer should remember that when a senior finds it necessary to reprimand him, the senior is acting in his official capacity and discharging his duties. The opinion which the senior entertains of the junior need not necessarily have been altered and there need be no change in their personal or unofficial relations.

4A2. Ways of securing discipline. Various ways are suggested for securing discipline. That method which is based upon the fear of the consequences of its violation—the discipline of fear—should be less and less necessary. There is what we like to consider as the American ideal of discipline—a cheerful and spontaneous one to which men willingly and gladly subject themselves out of faith in the cause for which they are striving and out of respect for and confidence in their leaders.

Men are controlled largely by one of two motives: the fear of punishment and the hope of reward. The latter is immeasurably the stronger of the two in the long run and the one generally to be striven for. Nevertheless, fear of punishment has its place in obtaining immediate results in certain cases. The Navy has no place for the habitual offender. Punishment, like dynamite, is strong and dangerous, valuable and destructive; astonishingly effective when used rightly and alarmingly destructive when used wrongly.

In every case of discipline it is wise to make sure of the facts before acting. Situations should be evaluated. For example, it is best not to come in contact with drunken men and above all not to argue with them, for their judgment and common sense at such a time do not function too well. The master-at-arms should take them into custody until sober.

When an officer trips a bluejacket in something, it should be an impersonal matter. In fact a twinkle of amusement in the eye will do no harm (unless the offense is a serious one involving the mast or a possible court). To be unbending in the application of punishment or reproof of misconduct is essential and important. It is fatal to let subordinates get away with anything.

An officer can't afford to lose his temper. In administering punishment he should be calm, impersonal, and dignified. If, however, he is extremely incensed at some deed of an enlisted man, precipitous action is unwise. After pacing the deck for a few minutes, he will be better able to handle the situation constructively. When dealing with an angry man, he too should be given the opportunity to "cool off." The calmer an officer is in his usual performance of duty,

the more action he can get when the occasion demands. The officer who is constantly shouting ceases to be effective and merely creates excitement.

Sarcasm, too, is a tool to be avoided. The bluejacket resents it since it is a weapon which takes unfair advantage of his relation to the superior.

At this point it would be well to consider carefully the words of John Paul Jones. "No meritorious act of a subordinate should escape attention or be left to pass without its reward, even if the reward be only one word of approval. An officer should be universal and impartial in his rewards and approval of merit, so should he be judicial and unbending in his punishment or reproof of misconduct." It is to be noted that Jones stresses appreciation first, and if that fails, disciplinary action. The officer who is unfamiliar with the meaning and use of commendation is laboring under a tremendous disadvantage. A word of friendly counsel to the new men, a little encouragement to the easily discouraged, a look of approval to a smart turnout at quarters, a smile of satisfaction to the turret crew after an exceptionally good performance at drill, a willing ear to the fellow with a suggestion—innumerable little acts of this kind will do more to keep men behind the officers, and abreast of them, than blind threats, the mast, brig, or a court-martial. *Commend publicly—reprove privately.*

If the boatswain's mate or coxswain has been working at some job in charge of a party of men and has handled the task quietly and efficiently, he might be commended in this way: "Very well, Brown, that was nicely done." The next time he has a job on hand he will take pride in equaling or surpassing the standard which he has established. It is poor judgment to administer praise too liberally, for men dislike an excess of it. They will regard the officer as insincere, or feel that he is trying to make himself "popular."

On the other hand, what procedure might be taken in the case of Coxswain Bill Smith whose motor boat has continuously fallen below the required standard of cleanliness? Here, the primary mission and objective is not the motor boat, but Smith himself.

Heckling and driving may help a little, but if it is possible to get Smith to take pride and an intelligent interest in his boat, then a great deal has been accomplished. Not only is the boat clean, but Smith has become an asset rather than a likely disciplinary case.

The naval officer bears much the same relationship to Smith that the latter does to the boat. Therefore, the officer must first discipline himself; find the proper relationship to his men; and all the Bill Smiths and their boats will, in due course, fall into line. It is a question of real leadership!

Remember, it is Smith who needs the repairing. So, reprimand him or encourage him; teach him or discipline him; handle him in whatever constructive way heaven gives you the wisdom to do, but don't leave him to muddle along unrepaired.

It is a naval axiom that a "taut ship is a happy ship" because the crew knows what to expect. A breach of discipline cannot be smiled away one day and rebuked the next. Discipline can be strict without being stiff and formal. In

the case of a first offense, light punishment may prove more effective than a stiff court sentence if it is (a) prompt, (b) certain, and (c) just.

Laxity in performance of duty, or insubordination, must be rooted as soon as it appears. Any hint of trouble must be promptly forestalled. A "Dutch Uncle" talk or a private reprimand at the start may save a mast or a court later. Equally desirable is an attitude of public commendation for outstanding work accomplished, but praise must not be expected for doing the required duty.

Another aid in securing discipline lies in the method of presenting "Rocks and Shoals." This is a familiar term for the *Articles for the Government of the Navy* which are the fundamental basis of authority and discipline. They are posted on the bulkheads of all ships and stations in the form of a large chart and are also found in *Navy Regulations*, etc. Officers are urged to study the "Articles" and review them frequently. Worthwhile dividends will accrue in the form of a higher standard of discipline, if they are read carefully (not inaudibly mumbled) and explained at quarters.

It is the duty of every division officer to explain to his men the gravity of desertion and the stigma of disgrace that attaches itself to a deserter all the days of his life. A man who is more than twenty-four hours late in returning to his ship or station is listed as a "straggler," and there are severe penalties awaiting him unless a satisfactory explanation can be made to the Commanding Officer. The status of a straggler changes to that of a deserter at the expiration of thirty days' unauthorized absence—or less, if the intent to desert is manifest. For example, if an enlisted man went ashore without permission, taking all his personal belongings with him and announcing to his shipmates that he was leaving the service for good, he should immediately be declared a deserter. Conviction of desertion in time of war makes discharge mandatory, as a man convicted of this offense can never again hold a position of trust or profit in the United States Government service. After conviction of desertion in time of war, a man cannot be restored to duty or ever again reenlisted.

It is well to tell the men something of the history of the "Articles" and their importance; to point out the fact that they represent the accumulated knowledge of generations of naval officers and represent the basic lessons of experience. They can be made both interesting and instructive.

4A3. Officer responsibility for discipline. It is the duty of an officer to study his men, watch them, learn their language and point of view, work with them, guide them, find out all their tricks and try to discover those leading in mischief. The officer reports whom he must and commends whom he can, but whatever he does, he must never lose faith, for when that happens, it is not they who are hopeless but he who is beaten. Teaching even one seemingly hopeless specimen to hold up his head and take a man's pride in himself, is one of the finest things an officer can do.

Nothing tends to destroy good discipline more than the attitude of an officer, who, by word and deed, says to his subordinates, "Don't do as I do. Do as I say." This is the false discipline of bad example from above. To promote good

discipline the officer must set high standards by example and precept and insist that these standards be maintained. Our bluejackets are too intelligent and too high-spirited to extend respect and loyalty to superiors who allow hypocrisy and insincerity to govern their actions. The officer must *practice what he preaches*.

When an officer is seeking the truth concerning an alleged offense he should question first the man making the report, afterwards the defendant, giving no credence to the story of either until all facts are clear. Before bringing a case to the mast it should be investigated thoroughly, going into the details of procurable evidence, and taking the names of all witnesses. If the inquiring officer is convinced that there is a definite case against the alleged wrongdoer or if he feels that further investigation under the more mature judgment of the Commanding Officer is needed, then and only then, should the culprit be reported. Indiscriminately bringing men to the mast for trivial offenses is not wise. On the other hand the "Popularity Jack," or the officer who under no condition reports a man, is a menace to discipline and a nuisance to his fellow officers.

If an officer hopes to deserve loyalty and obedience from those under him, he must earn them by giving like qualities upward. If by action or word he is disloyal to his superiors, the men will doubt his loyalty to them, and their loyalty to him will suffer correspondingly. It is essential for the officer to let his men know that he respects and honors the policies and motives of their common senior. Just as jealously, he guards his loyalty to his men and looks out for them. He takes an interest in them; knows them by name; is jealous for them, of their rights and privileges. Under such conditions, offenses requiring disciplinary action become less and less frequent. (Few American naval officers fulfilled these requisites better than did Stephen Decatur. Problems of discipline were rare on his ship.)

The Commanding Officer at Captain's Mast can assist most men to a better presentation of their cases when he asks, "What seems to be the matter?" or "How did this happen?" and similarly phrased questions indicating a desire to hear all that the man may have to say in his own behalf. The usual stereotyped "What have you got to say?" is likely to invite a hopeless, defensive, or even resentful attitude, which is not helpful to the main issue—the administration of justice.

Under no circumstances should the Commanding Officer do or say anything at mast which would tend to tear down a man's pride or confidence in himself. It is to be remembered that it is the *act* of misconduct which receives condemnation, rather than the individual who committed it. The accused person should leave the mast not with a beaten feeling, but with a determination that he can and will do better in the future.

Certain mast cases, and punishment inflicted there, may be a reflection on the methods of the officer who trained and indoctrinated his subordinates. The best discipline comes from positive, energetic, and just leadership. As Admiral Jervis said, "Discipline begins in the wardroom." (Floggings were infrequent on ships under great leaders, such as Decatur and Nelson.)

Mastless discipline is not a one-man show, nor is it dependent on the officers alone. Every petty officer is necessarily a technical expert in some line and his rating badge signifies that he is a leader of men. He is an important part of the ship's disciplinary organization. Therefore, he should be invested with authority, and it is the part of wisdom to work through him, support him, and hold him responsible for the results. Nothing creates greater confusion than for an officer to give orders over a petty officer's head without advising him that he has been relieved from direct supervision of the particular task. The petty officer should never be reprimanded in public; to do so weakens his authority as well as his morale. If he is at fault, a private talk will clear the matter and prevent indiscreet judgment on the case.

Every day it is becoming more apparent that as ships and crews grow in size, petty officers must be increasingly relied upon. For example, if an enlisted man makes a mistake in the presence of both an officer and a petty officer, it is the duty of the latter to instruct the man. Moreover, unless this duty becomes habitual on the part of the petty officer, he should be reprimanded. A petty officer who stands and complacently watches a man commit a breach of discipline, without endeavoring to correct him immediately, commits a far worse offense than the man he watches. Any petty officer who is not alert and actively assertive for the good of the ship should not be tolerated even for an instant—there are many men eager to take his place.

Navy punishment must be just, and to accomplish its purpose, must be so recognized by the recipient as well as by his shipmates. It should not be of such nature as to lower the man's self-respect nor so severe as to be out of proportion to the gravity of the offense. Most certainly, personal likes and dislikes should never motivate a reprimand or function in the matter of awarding punishments. No matter how exacting a leader may be, if he is fair and just, his subordinates will not only live up to his exactions but respect and admire his attitude. To find fault with a man doing his best is only to discourage him utterly. It is useless to punish a man for incompetence if he has done his best. It is possible to be firm without being a "stuffed shirt"; to be friendly without being chummy.

The keynote of Navy discipline is expressed in Article 90 of *Navy Regulations*: "All persons in the Navy are required to obey readily and strictly, and to execute promptly, the lawful orders of their superiors." The rules of conformance with this regulation can be enumerated concisely as follows:

- (1) Obey orders promptly, cheerfully, willingly, and completely.
- (2) Obey the last order received from any responsible authority.
- (3) Show respect to your seniors at all times.
- (4) Make obedience a habit.

Military offenses as contradistinguished from the conventional crimes and misdemeanors may be divided into two classes: (1) those involving neglect of duty; and (2) those involving deliberate violation of orders, regulations, or instructions. Offenses under the head of neglect of duty, great or small, may

result in punishment extending from loss of liberty to a general court-martial.

Offenses under the head of deliberate violation of orders, regulations or instructions are usually tried by court-martial. In this case, the offense, as a rule, lies not so much in the consequences of the act as in the defiance of authority. It goes without saying that offenses involving moral turpitude or felonious intent, such as theft, forgery, rape, murder, etc., will result unquestionably in punishment by naval court-martial.

4A4. Principles of good discipline. In conclusion, let us summarize the principles of good discipline.

"A taut ship is a happy ship" because the crew knows what to expect.

It is a well-established fact that those ships are the happiest and most efficient wherein the discipline is firm and infractions are punished promptly, evenly, and adequately.

It is not the severity of punishment that restrains men, but the certainty of it.

A "Dutch Uncle" talk or a private reprimand may save a mast or a court sentence later.

Nothing gives a better indication of the state of discipline than the observance of the forms of military courtesy.

Do not let trouble get headway if you can avoid it.

Punishment is not (a) personal, (b) vindictive, (c) inflicted as revenge, or (d) a righting of a wrong. It does, however, furnish an object lesson to the wrongdoer and to others not to repeat the offense.

If you hope to secure loyalty and obedience from your men, you must earn it by giving loyalty and obedience upward. Be loyal to your men, take an interest in them, and make sure they enjoy their rights and privileges. Remember, you may drive men to obedience, but you cannot drive them to loyalty.

Don't talk or argue with a drunken man. Turn him over to the master-at-arms for safekeeping until sober.

Commend publicly—reprove privately.

Gain the confidence of your men and be worthy of it.

Don't lose your temper. Avoid using sarcasm and ridicule in dealing with your men.

Be unbending in the reproof of misconduct—don't allow men to get away with *anything*.

Use "Rocks and Shoals" as a tool for better discipline.

In maintaining discipline, give your petty officers authority, work through them, support them, and hold them responsible for results.

Good example on the part of officers is a prime requisite both in the building up of discipline and in its maintenance. Officers must *practice what they preach*.

A ship's company may be said to have been brought to an ideal state of discipline when there exists in it a maximum of efficiency and contentment combined with a minimum of punishment.

4A5. Disciplinary problems in NROTC Units. In connection with the subject of naval discipline, it may be worthwhile to digress for a few minutes to

analyze certain disciplinary problems which will be of particular interest to officer candidates. In the NROTC Units, the following are some of the more serious offenses for which punishment is provided.

1. Falsehood, "gouging," etc. Offenses which may be condoned elsewhere are intolerable among officer candidates in the Navy. Article 3101 of the U. S. Naval Academy Regulations (1940) should be of interest to officer candidates:

Article 3101. Honor, personal integrity, and loyalty to the Service, its customs and its traditions, are fundamental characteristics essential to a successful naval officer. Any midshipman unable to conduct himself at all times in a manner indicating the highest standard of honesty, integrity and manliness, is unfit to hold a commission in the Navy or to enjoy the privilege of being a member of the regiment. Therefore, any midshipman guilty of offenses of a dishonest nature, such as Falsehood (including any form of deception or attempt to deceive), or Fraud (including false muster, answering for another at muster. "Gouging" or of any form of cheating), or any offense indicating Moral Turpitude, is an individual intolerable to the regiment, and becomes immediately subject to a recommendation for dismissal from the Naval Service.

"Truthfulness is the warp and woof of our naval fabric."

2. Conduct unbecoming an officer candidate. The following examples illustrate the sort of thing that is not tolerated in officer candidates: contracting debts beyond current ability to pay, failure to obey orders of student officers, use of obscene language, intoxication, indecent exposure, and while on liberty annoying and showing disrespect to girls.
3. Unauthorized absence. This is an offense which is frequently committed. It takes numerous forms, varying in degrees from the man who is delayed in returning to the ship by reason of a blockade in traffic, or one who is not called in the morning, to the man who deliberately remains out for months or years. Overstaying leave because of oversleeping, involves neglect on the man's part and is a serious offense. He should get back to his ship or station as quickly as possible. Overstaying leave deliberately for any reason is a very serious offense, since it defies the authority placed over the individual. Remember that when you are over leave you let your country down, you break faith with your ship and the Navy, and you do irrevocable harm to your own record.

The following procedure is suggested, if you are unable, because of sickness, to return on time from leave:

- (1) Telegraph your Commanding Officer a brief explanation. (If this is impossible, request Red Cross representative to do so.) Retain a copy of the telegram.
- (2) If physically able, report to nearest naval activity.
- (3) If in need of medical attention, report to nearest naval or army medical activity or civilian doctor. (In either case, obtain medical certificate in duplicate.)
- (4) Mail duplicate medical certificate to Commanding Officer and retain original.
- (5) Advise Commanding Officer by mail of progress of recovery.

- (6) When able to travel, procure final medical certificate in duplicate showing complete record of illness.
- (7) Deliver certificate to Commanding Officer upon return to ship or station.

B. NAVAL LAW

4B1. Purpose and scope of naval courts. Naval law may be defined as the body of rules prescribed by competent authority for the government and regulation of the naval forces. Any system of discipline, however effective, would be inadequate if it were not backed up by the authority of a prescribed set of rules which exist for the purpose of enabling the naval tribunals to judge serious offenses. The practical application of this set of rules is manifest in the functioning of the naval courts. The composition of these courts is such that they can be summoned at comparatively short notice. The naval tribunals, in order of their severity, are: the captain's mast, deck court, summary court-martial, and general court-martial.

These four judiciary bodies are empowered to deal with offenses ranging from the simplest infractions, which are dealt with at captain's mast, to the most serious violations of naval law, which are adjudged by a general court-martial. The punishments which they are authorized to inflict range from a simple sentence of extra duties up to and including loss of life.

Men of the Navy are no different from men in any other walk of life and the Navy's system of courts must cover as wide a scope as any civil judicial system.

4B2. Civil courts and naval personnel. The fact that a man is in the naval service does not free him from his obligation to observe the laws governing the civilian population. Naval personnel are subject also to civil courts when within their jurisdiction. Should civil authorities come aboard ship or enter a naval station for the purpose of apprehending naval personnel, the Commanding Officer is required by *Naval Courts and Boards* to communicate with the Secretary of the Navy and to obtain instructions from him. It is considered desirable in most cases, where the Navy is able to provide proper punishment for offenses, to inform civil authorities that prompt and just action will be taken by the Navy. The Navy tries whenever possible to take care of its own disciplinary cases.

If for any reason a Navy man is held by civil authorities, for example, as an offender or as a material witness in court, he should take necessary steps to have his Commanding Officer notified at once of the pertinent facts. If he is blameless his enforced absence, when released, will not be penalized. But if he is found guilty of an offense by the civil authorities he will not only get the punishment handed out by them, but will also receive a punishment for overstaying his leave.

4B3. Need for officer's knowledge of naval law. The basic essentials of military law and the procedure in naval courts must be thoroughly familiar to the naval officer. An officer may be called upon at any time to fill various roles

in the conduct of naval courts, as: recorder or judge advocate, when he performs as prosecuting attorney; member of a court-martial, when he combines the duties of judge and jury; or counsel for an enlisted man, when he acts as lawyer for the defense.

Naval courts are conducted with all the formality and gravity of similar courts in civil life. Each individual present is there for a definite purpose and has a great responsibility assigned him. Each one must play his part in such a way as to maintain the dignity of the court and insure the swift, efficient administration of justice. There can be no hesitation, no doubt as to what to do next, if the procedure is to follow smoothly its prescribed routine. It can be readily seen that the composition of such a court must be individuals who have a background of previous study of the fundamentals of naval law and are, moreover, imbued with a thorough awareness of the importance of their role in its practical application.

4B4. Sources of naval law. There are two general sources of naval law, *written* and *unwritten*. The written sources are: (1) the Constitution of the United States; (2) Statutory enactments of Congress; and (3) *Navy Regulations*, orders, and instructions. The sources of unwritten law are: (1) decisions of courts; (2) decisions of the President and the Secretary of the Navy; (3) opinions of the Attorney General and Judge Advocate General of the Navy; (4) court-martial orders; and (5) customs and usages of the service. The so-called unwritten sources (1), (2), (3), and (4) do appear in writing, but are not considered as written law since they have not been embodied into Statutes, Regulations, etc.

C. CAPTAIN'S MAST

4C1. Procedure. A man is considered to be on the report when he has been placed under arrest or officially informed by proper authority that certain charges have been preferred against him, after which he will normally be made a prisoner at large by order of the Commanding Officer.

The procedure for placing enlisted personnel on report varies on different ships and stations. On some ships or stations the petty officer making the charge brings the offender to the man's division officer, who makes a written statement which includes the offender's name, the charges, the reporting petty officer's name, and the names of any witnesses. This report slip is then submitted to the executive officer's office. In some instances the person making the charge may bring the offender before the officer of the deck who makes out the report slip. The police petty officer of the ship, the master-at-arms, serves immediately under the executive officer and may place a man directly on report. (This latter would apply particularly to violations of ship's regulations, such as smoking in restricted places or being out of uniform.) Of course, any commissioned officer who sees a breach of discipline, either afloat or ashore, may place a man on report. For example, if a man were late returning to his ship from liberty, the officer of the deck would place him on the report as he comes over the gangway.

When the report slip is received at the executive officer's office it is entered in the "Rough Report Book."

Usually the executive officer makes a preliminary investigation of each case reported on the previous day when he first arrives at his office in the morning. The master-at-arms rounds up all the delinquents and in the presence of the reporting officer, the executive officer hears the stories briefly. He may dismiss any cases which seem vague or not well-founded. He must assure himself that the man is guilty of an offense of such seriousness as to warrant going to mast.

Usually, after the morning inspection, the executive officer furnishes the Commanding Officer with a list of the enlisted personnel who were reported for offenses during the preceding day. At a convenient time—aboard ship frequently just before noon—Captain's mast is held. On large ships, usually a lee spot on deck, outside the Captain's cabin, is selected as the most convenient place. Often the pulpit used in divine services is set up for the Captain. On this is placed the big, bound book of record of Captain's mast.

The executive officer, who has previously investigated each case, stands by to advise the Captain. The executive officer's yeoman stands by with the Service Records of all men brought to mast. Also standing by are the master-at-arms and all witnesses for the accuser and the accused. The accused line up on one side, the reporting officers and division officers on the other.

As each man is called in turn, he steps up before the Captain, and uncovers; the reporting officer and the man's division officer also step forward. The offense is read; then the Captain hears the man's statement, the reporting officer's statement, and the division officer who may wish to put in a word or whom the Captain may wish to question about the man. The man's Service Record is carefully examined by the Captain before he makes a decision. During the whole procedure all the dignity and seriousness of a higher court are maintained.

In passing judgment, the Commanding Officer may dismiss the case if he considers the report unjustified; if the offense is a minor one, he may merely warn the accused; if in his opinion the offense is serious enough to deserve punishment, he may administer sentence immediately.

It should be emphasized that the captain's mast is used to try lesser offenses, and if the Commanding Officer should decide that the nature of the offense is such that it warrants a greater punishment than he is empowered to administer, he may assign a deck, or summary court-martial, or recommend to the proper authority that the case be tried by a general court-martial. If the case, however, is not considered serious but involves complications which require extended investigation, the Captain usually assigns a deck court.

The term *captain's mast* or merely *mast* is derived from the fact that in early sailing days the usual setting for this type of naval justice was on the weather deck at the foot of the ship's mainmast.

4C2. Punishments. The Commanding Officer under *Navy Regulations* (article 24) is limited in the penalties he may impose. These punishments consist of any *one*, or part of any *one*, of the following:

- (1) Reduction of any rating established by himself.
- (2) Confinement not exceeding 10 days, unless further confinement be necessary, in the case of a prisoner to be tried by court-martial.
- (3) Solitary confinement, on bread and water, not exceeding 5 days.
- (4) Solitary confinement, not exceeding 7 days.
- (5) Deprivation of liberty on shore.
- (6) Extra duties.

A court-martial may not consider any of the above punishments as a previous conviction to be applied subsequently in some other offense. Under no circumstances, may an offender be ordered to do guard duty over personnel or material as a punishment.

In the "Smooth Report Book," an official record, is entered the action taken by the Commanding Officer at mast. It is also entered in the man's Service Record and signed by the officer in command.

Whenever expedient, the Navy Department strongly advocates mast punishment, rather than that of a higher tribunal. Brevity and directness characterize the procedure. Moreover, the punishment is prompt—always a strong factor in the maintenance of good discipline.

4C3. Special masts. Two additional types of masts are: (1) the *request mast* which is held by the executive officer at a specified time to listen to the men having complaints or desirous of requesting special privileges and consideration; (2) the *meritorious mast* which is held by the Commanding Officer to commend the action of an enlisted man publicly.

D. DECK COURTS

4D1. Purpose. Since the Commanding Officer is restricted in awarding punishments to his men, if in his opinion it seems advisable, a deck court may be convened by him for the purpose of imposing greater punishment. Should the offense be of a more serious nature, he may convene a summary court-martial. In the case of an extremely serious situation, he may recommend a general court-martial. (A deck court may be ordered by any officer in the Navy or Marine Corps who is authorized to order a summary court-martial or a general court-martial.)

4D2. Deck court officer. A deck court consists of one commissioned officer called the *deck court officer*. He must hold the rank of lieutenant or above in the Navy and captain or above in the Marine Corps, having had at least six years of commissioned service. If these requirements cannot be met in a particular situation, the Commanding Officer (if commissioned) may serve as deck court officer. Any officer (if commissioned), irrespective of his rank, may designate himself to act in this capacity, provided he has been empowered to order deck courts. The deck court officer performs his duties under the sanction of his oath of office. The witnesses, testifying under oath, are examined by the deck court officer, who conducts the entire trial. He himself may not be a witness either for the prosecution or for the defense.

4D3. Recorder. The recorder, who is sworn to keep a true record of the proceedings, may be any person under the command of the convening authority. Generally this duty is carried out by a competent yeoman.

4D4. Punishment. Prior to his trial before a deck court, the enlisted man must indicate his willingness to be tried by such court and sign a statement to that effect in the record. Should he oppose a trial by deck court, he is ordered to appear before a summary or general court-martial. However, since the punishments awarded by deck courts are less severe than those of higher tribunals, the enlisted man is not likely to object. A deck court is vested with the power to award any *one* of the following punishments:

- (1) Solitary confinement, not exceeding 20 days, on bread and water or on diminished rations.
- (2) Solitary confinement not exceeding 20 days.
- (3) Confinement not exceeding 20 days.
- (4) Reduction to next inferior rating.
- (5) Deprivation of liberty on shore on foreign station.

Extra police duties, and loss of pay, not to exceed 20 days, may be added to any of the above-mentioned punishments.

4D5. Record and disposition. A brief and concise record of a deck court is entered on a deck court card (available on all naval vessels and stations, and also obtainable from the Office of the Judge Advocate General). The deck court officer inscribes thereon the findings and the sentence; all other entries are typewritten. Testimony taken at the trial does not appear on the record card. However, the facts established by the testimony are recorded on separate sheets and submitted to the convening authority for his guidance.

If the accused is acquitted, he is so informed by the deck court officer. If convicted, the findings and sentence, upon approval of the convening authority, are published; a transcript of the trial is entered in the ship's log; an entry is made in the man's Service Record; and the deck court card is forwarded to the Office of the Judge Advocate General.

4D6. Review. All sentences of deck courts may be carried into effect upon approval of the convening authority or his successor in office. He has full power as reviewing authority to remit or mitigate, but not to commute any sentence, and to pardon any punishment a deck court may adjudge. Until the sentence of the deck court is approved or mitigated, it cannot be carried into effect.

A few words should be inserted here to clear up the meaning of certain legal terms commonly found in naval law. *Remit* means literally to give back. Thus in sentences involving loss of pay and confinement, the loss of pay is frequently remitted. *Mitigate* means to lessen the severity of a sentence; for example a sentence of 30 days' solitary confinement may be mitigated to 20 days. *Commute*, on the other hand, means to change the nature of the punishment, ordinarily substituting for one penalty another less severe. A sentence to reduction in rating, for example, might be commuted to confinement.

E. SUMMARY COURTS-MARTIAL

4E1. Purpose. Summary courts-martial (note that the plural of court-martial is *courts-martial*) may be ordered (convened) by a Commanding Officer for the trial of petty officers or other enlisted personnel who, in the officer's opinion, warrant a greater punishment than the deck court may award, but not so great as a general court-martial may authorize.

4E2. Composition. The members of a summary court-martial include three commissioned officers and one officer recorder. The highest in rank is called the *senior member*. The three members act both as judge and jury. As judge, they decide on the admissibility of evidence and determine the sentence if the accused is found guilty. As jury, they weigh the evidence and decide on the guilt or innocence of the accused. The recorder, usually an ensign, acts as prosecuting attorney and conducts the case for the Government.

4E3. Procedure. The first steps in the proceedings of a summary court-martial are the preparation of the precept and the specification by the convening officer. The *precept* is the order convening the court. It is signed by the convening authority and addressed to the senior member of the court. It specifies the time and place of meeting and indicates the composition of the court. A *specification* clearly states sufficient facts to constitute an offense, so that the accused may readily understand the charge. In naval law, a specification sets forth the facts constituting an offense for which a man is to be tried. After the court has been convened and the specification drawn up, these papers are turned over to the recorder by the senior member.

In order to determine upon a sentence, each member (in writing) states the measure of punishment he believes should be imposed upon the accused and gives his vote to the senior member. The latter reads the votes aloud. If a majority is not reached, he begins with the mildest penalty proposed, reads it aloud, and asks each member beginning with the junior, "Shall this be the sentence of the court?" Should there be no decision, the senior member obtains a *viva voce* vote on the punishment next in degree of severity, as before, until a sentence is decided upon.

4E4. Punishment. Courts-martial must adjudge a punishment commensurate with the offense. The limit, however, is regulated by law and for summary courts restricted to any *one* of the following:

- (1) Discharge from the service with a Bad-Conduct¹ Discharge; but the sentence shall not be carried into effect in a foreign country.
- (2) Solitary confinement, not exceeding 30 days, on bread and water or on diminished rations.
- (3) Solitary confinement not exceeding 30 days.
- (4) Confinement not exceeding 2 months.
- (5) Reduction to next inferior rating.

¹There are five characters of discharge: Honorable Discharge, Discharge under Honorable Conditions, Undesirable Discharge, Bad-Conduct Discharge, and Dishonorable Discharge. For further discussion, see Appendix I.

(6) Deprivation of liberty on shore on foreign station.

Extra police duties, and loss of pay not to exceed 3 months, may be added to any of the previously mentioned punishments.

4E5. Review. The record, having been signed by the court members (including the recorder), is forwarded to the convening authority for action, thence to the reviewing authority (immediate superior in command) for further action. With his approval, the sentence may be executed immediately. However, if a Bad-Conduct Discharge is adjudged and is not conditionally remitted and the accused is serving in an extension of enlistment or in a second or subsequent enlistment, the authority of the Navy Department is required before the sentence may be executed.

F. GENERAL COURTS-MARTIAL

4F1. Definition and purpose. The highest tribunal in naval law is the general court-martial. It may be convened by the President, the Secretary of the Navy, the Commander in Chief of a fleet or squadron, and the Commanding Officer of a naval station beyond the continental limits of the United States; and when empowered by the Secretary of the Navy, by the Commanding Officer of a squadron, division, flotilla, or larger naval force afloat, and of a brigade or larger force of the naval service on shore beyond the continental limits of the United States; and in time of war, if then so empowered by the Secretary of the Navy, by the Commandant of any navy yard or naval station, and by the Commanding Officer of a brigade or larger force of the Navy or Marine Corps on shore not attached to a navy yard or naval station.

A general court-martial is convened for the purpose of trying commissioned officers as well as all other naval personnel.

During the present war there are one or more permanent general courts-martial in each naval district and certain aviation commands.

4F2. Composition and procedure. A general court-martial is composed of 5 to 13 commissioned officers and a judge advocate. The senior officer is called the *president*. (If possible, without injury to the service, not more than one-half of the members, exclusive of the president, shall be junior to the officer tried.)

The judge advocate is the prosecutor and his duties correspond to those of the recorder of a summary court-martial.

Both summary and general courts-martial are formal trials and a complete transcript is made of all testimony. The accused has the right to be represented by counsel and to call witnesses. He himself may testify in his own defense although he cannot be required to do so.

4F3. Punishment. The maximum punishments which such a court-martial may award are outlined in *Naval Courts and Boards*, Section 457. The court may impose any of the punishments which an inferior court may impose plus a sentence of *death, dismissal, dishonorable discharge, or confinement at hard labor in prison*.

4F4. Review. The record of a general court-martial is first sent to the convening authority for his action and then forwarded to the Office of the Judge Advo-

cate General where it is reviewed for technical correctness. From there it goes to the Bureau of Naval Personnel where it is reviewed for conformity to bureau policy. This bureau has only the power to *recommend* changes in the record. Next, it is sent to the Secretary of the Navy who has authority to reduce the sentence if he sees fit. If the sentence involves loss of life or dismissal from the service, the Secretary must send the record to the President with a recommendation that it be executed, remitted, or mitigated. Records not involving the supreme penalty or dismissal from the service go directly from the Secretary to the Office of the Judge Advocate General. In any case it is to the Office of the Judge Advocate General that any record of a general court-martial is ultimately forwarded and permanently retained.

Wartime courts. The Navy Department outlined its policy in the administering of naval discipline during the war in an AlNav released in April, 1942. It reads:

In the interest of reducing paper work and better administration of Naval Justice, the Department directs that all commands utilize to a greater degree, mast punishments rather than summary and deck courts-martial and trial by deck court rather than summary courts-martial and by summary rather than general courts-martial in cases of infractions by enlisted men of the Navy, Marine Corps and Coast Guard, when such action will accomplish the ends of discipline. Also, utilize to full extent use of administrative reports or informal or one-man investigations in lieu of formal three-man boards of investigation.

G. PUNISHMENTS INFILCTED ON OFFICERS BY COMMANDING OFFICERS

4G1. Types of punishment. The Commanding Officer of a vessel is limited by *Navy Regulations* in the punishments which he may inflict on an officer, either commissioned or warrant, under his command. The following are the only such punishments authorized:

- (1) Private reprimand.
- (2) Suspension from duty.
- (3) Arrest.
- (4) Confinement.

No suspension, arrest, or confinement shall continue longer than 10 days unless a further period is necessary to bring the offender to trial by court-martial. The procedure is informal but a report in letter form should be made to the Bureau of Naval Personnel. The officer's fitness report will, no doubt, indicate any punishment made by the Commanding Officer.

4G2. "Under hack." The slang term "under hack" is frequently heard in the Navy and it refers to a punishment the Commanding Officer may inflict upon a commissioned or warrant officer. The officer is said to be "under hack" when he is suspended from duty and restricted in his activities. For example, the Commanding Officer might order the officer suspended from duty and restricted to his quarters for five days except during meal periods and periods of exercise. *Regulations* state definitely that every suspense, arrest, confinement, and restoration to duty must be entered upon the log book. Should the Commanding Officer urgently need the services of the officer in the example above, he could

order him immediately back to duty after having the punishment logged and then restrict him to the limits of the ship. In either case, the suspension not only would be logged but would be noted in the officer's fitness report, together with the reasons for the punishment. An admonition or caution in the ordinary course of duty is not considered as a reprimand in the sense of punishment.

H. DISCIPLINARY LETTERS

4H1. Types of letters. In addition to the punishments that may be awarded by a Commanding Officer or a general court-martial, an officer may receive one of three types of formal disciplinary letters. These letters in order of severity are: reprimand, admonition, and caution.

Any one of these letters may originate with the Secretary of the Navy, Chief of the Bureau of Naval Personnel, any fleet or force commander, and certain other officers of flag rank.

4H2. Contents of letters. Such letters may be recognized by the fact that the Subject is usually reprimand, admonition, or caution, as the case may be. The first paragraph in each instance normally describes the offense and the second paragraph carries the reprimand, admonition, or caution. Circular letter No. 2-45 (3 Jan. 1945) specifically states that those commands authorized to address to officers letters of reprimand, admonition, or caution, or any other letter reflecting adversely upon the officer addressed, include therein a paragraph as follows:

A copy of this letter will be forwarded to the Bureau of Naval Personnel to be filed with your official record. In accordance with General Order No. 62, you are privileged to forward through official channels to that Bureau for filing such statement concerning this letter as you may desire.

Letters addressed by the Secretary of the Navy and the Chief of the Bureau of Naval Personnel may or may not expressly exclude the officer addressed from promotion pursuant to any future promotional directive.

Unfavorable matter is never to be filed in connection with an officers' record without his knowledge and an opportunity to reply thereto. *Navy Regulations* (art. 202) reads: "Whenever an accusation is made against an officer, either by report or by indorsement upon a communication, a copy of such report or indorsement shall be furnished him at the time."

4H3. Typical offenses. The following acts of misconduct might be handled by the Commanding Officer, might lead to a general court-martial or might elicit any one of the three letters referred to above. (a) An officer addressed a letter during the present war to another officer aboard ship indicating the vessel and its location on the envelope. (b) An officer lost or mislaid classified matter. (c) An officer had the deck at sea and changed the course without advising the Commanding Officer. (d) An officer had the deck at anchor and failed to be sufficiently alert to realize that the ship was dragging anchor and to take immediate steps to prevent it. (e) An officer came aboard ship in the morning and showed signs of overindulgence in alcoholic beverages.

It is impracticable to assign a particular punishment as appropriate for any

particular offense, since it is always necessary to evaluate the offense in the light of all surrounding circumstances and to exercise judgment and discretion in determining what action will, in the circumstances, best serve the interests of the Navy.

The Secretary of the Navy has the authority, in cases of serious misconduct, to discharge from the naval service "for good and sufficient reasons appearing" to him, any line officer on active duty with less than seven years' continuous duty. This might occur in cases where trial by court-martial was impracticable. Such discharges are normally effected after an informal hearing in the Bureau of Naval Personnel at which time the officer is permitted to present written statements in his own behalf and to make such oral statements as he may see fit.

I. DISCIPLINE AND NAVAL RESERVE OFFICERS

4I1. Reservists subject to naval regulations. All members of the Naval Reserve, when employed on active duty, authorized training duty, with or without pay, drill, or other equivalent instruction or duty, or when employed in authorized travel to or from such duty, or appropriate duty, drill, or instruction, or during such time as they may by law be required to perform active duty, or while wearing a uniform prescribed for the Naval Reserve, are subject to the laws, regulations, and orders for the government of the Navy.

4I2. Disciplinary action not barred by release from duty status. Disciplinary action for an offense committed while subject to the laws, regulations, and orders for the government of the Navy is not barred by reason of release from duty status of any person charged with the commission thereof.

Members of the Naval Reserve may be retained on or returned to a duty status without their consent, but not for a longer period of time than may be required for disciplinary action.

4I3. Discharges of officers and men. In time of peace no officer or man of the Naval Reserve may be discharged except upon the expiration of his term of service or upon his own request for full and sufficient cause in the discretion of the Secretary of the Navy or in the cases of enlisted men in the discretion of the Chief of the Bureau of Naval Personnel.

Officers and men of the Naval Reserve on active duty are subject to separation from the Naval Reserve in the same manner as may be provided by or in pursuance of law for the separation of officers and men of the Regular Navy.

Officers and enlisted men whose services are determined to be of greater value to the Government in the event of war, in present civilian occupation than they would be if mobilized as Naval Reservists, will be discharged upon recommendation by the district commandants, but without prejudice to their later reappointment or reenlistment in the grade or rate held at the time of discharge provided they are qualified in accordance with current regulations and are needed to fill vacancies in quotas.

4I4. Discharge of officers for cause. Officers of the Naval Reserve may be discharged by the Secretary of the Navy for full and sufficient cause, including the following:

- (a) Failure to keep the Bureau of Naval Personnel and the district commandant informed of official residence.
- (b) Failure to reply to official communications.
- (c) Failure to submit such reports as may be required by the Secretary of the Navy.
- (d) Obvious lack of interest.

Within a reasonable time prior to discharge for cause, officers shall be given an opportunity to be heard by the Secretary of the Navy, or such administrative authority or other agency as he may designate, which opportunity will be considered as having been given through the mailing of notice to their address on file in the Navy Department.

Officers under consideration for discharge for cause may submit such statement as they desire to the Chief of the Bureau of Naval Personnel via official channels. Officers receiving notification of their pending discharge are also privileged to state their cases in person to the Chief of the Bureau of Naval Personnel, or to the commandant of the naval district, or to such officer attached to the Bureau of Naval Personnel or to the staff of the commandant of the naval district not below the rank of commander as may be assigned such duty by the Chief of the Bureau of Naval Personnel or the commandant. The written statement submitted by the officer will be transmitted to the Secretary of the Navy for his consideration, with the letter of the Chief of the Bureau of Naval Personnel recommending discharge.

Officers receiving notification of their pending discharge shall promptly acknowledge same and will be given approximately 30 days, exclusive of the usual length of time required for transmittal of a letter through the mails, in which to prepare a statement or otherwise to be heard. Extensions of time in which to prepare a statement may be granted at the discretion of the Bureau of Naval Personnel.

4I5. Routine administrative discharges of officers. Officers of the Naval Reserve may be discharged by the Secretary of the Navy for the following administrative reasons:

- (a) Age in grade.
- (b) Failure to appear for or failure to pass prescribed physical or professional examinations.
- (c) Failure to carry out agreement entered into prior to appointment.
- (d) Civilian occupation incompatible with Naval Reserve status.
- (e) Approval of a claim for a pension, permanent disability allowance or compensation, or retired pay.

J. COURTS OF INQUIRY AND BOARDS OF INVESTIGATION

4J1. Purpose. As the names imply, courts of inquiry and boards of investigation are primarily fact-finding bodies. Unless specifically directed by the convening authority to express opinions or make recommendations, they should confine themselves to findings of fact. The proceedings of these bodies are in no sense a trial of an issue or of an accused person; they perform no real judicial function; they are convened solely for the purpose of informing the convening authority in a preliminary way as to the facts involved. Their conclusions are advisory only. The function, therefore, of these bodies is merely to aid the convening authority in the performance of his administrative duties and not to relieve him of the responsibility for his administrative acts.

NAVAL ORIENTATION

Figure 9. Comparative Table of Naval Tribunals

I Name of Court	Mast	Deck Court	Summary Court-Martial	General Court-Martial
II Convening authority	Commanding Officer	Commanding Officer or any officer empowered to convene a summary or general court.	Same as Deck Court	President, Secretary of Navy, the Commander-in-Chief of a fleet or squadron, and the Commanding Officer of a naval station beyond the continental limits of the U. S.; and Commanding Officers specifically authorized by the Secretary of Navy. (Commandants of Naval Districts in the U. S., the five Functional Air Training Commands and the Commander Amphibious Training Command Atlantic Fleet are now authorized.)
III Personnel	Commanding Officer	<i>One</i> commissioned officer of <i>Three</i> officers not below the rank of Ensign as members and an officer recorder, one member to possess qualifications of member of General Courts-Martial.	<i>5 to 13</i> members with rank of Lieutenant in the Navy or Captain in the Marine Corps or above and a judge advocate. ($\frac{1}{2}$ of members senior to accused)	Offenses of a serious nature (both officers and enlisted personnel).
IV To try what cases?	Lesser offenses (enlisted personnel)	Minor offenses (enlisted personnel) meriting greater punishment than Commanding Officer is empowered to adjudge.	Offenses deserving greater punishment than Commanding Officer is authorized to inflict but not sufficient to require trial by a General Court-Martial. (Enlisted personnel).	

DISCIPLINE

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V Punishments

1. Reduction of any rating established by himself. 2. Confinement not exceeding ten days unless further confinement becomes necessary in the case of a prisoner to be tried by Court-Martial. 3. Solitary confinement on bread and water, not exceeding five days. 4. Solitary confinement not exceeding seven days. 5. Deprivation of liberty on shore. 6. Extra duties.	1. Solitary confinement, not exceeding twenty days, on bread and water or on diminished rations. 2. Solitary confinement not exceeding twenty days, Confinement not exceeding twenty days. 3. Reduction to next inferior rating. 4. Deprivation of liberty on shore on foreign station. 5. Extra police duties; and loss of pay, not to exceed twenty days, may be added to any of the above punishments.	1. Solitary confinement, not exceeding thirty days, on bread and water, or on diminished rations. 2. Solitary confinement not exceeding thirty days. 3. Solitary confinement not exceeding two months. 4. Confinement not exceeding two months. 5. Reduction to next inferior rating. 6. Deprivation of liberty on shore on foreign station. 7. Extra police duties; and loss of pay, not to exceed three months, may be added to any of the above punishments.	Any of the punishments that may be awarded by an inferior court, plus death, dishonorable discharge, confinement at hard labor in a prison, or other such punishment as the court may direct. Punishments forbidden: flogging, branding, marking, or tattooing on the body.	1. Bad-conduct discharge from service, but not carried into effect in foreign country.
				2. Solitary confinement, not exceeding thirty days, on bread and water, or on diminished rations.
				3. Solitary confinement not exceeding thirty days.
				4. Confinement not exceeding two months.
				5. Reduction to next inferior rating.
				6. Deprivation of liberty on shore on foreign station.
				7. Extra police duties; and loss of pay, not to exceed three months, may be added to any of the above punishments.

No Review

VI Reviewing Authority

1. Commanding Officer or other convening authority. 2. SecNav (JAG and BuPers)	1. Citing authority. 2. Immediate superior in command or senior officer present. 3. SecNav (JAG and BuPers)	1. Convening authority.
		2. Judge Advocate General.
		3. Chief of Naval Personnel.
		4. Secretary of Navy.
		5. President of United States. (Death sentence or dismissal of commissioned or warrant officer).

4J2. By whom convened. Courts of inquiry may be convened by the President, the Secretary of the Navy, the commander of a fleet or squadron, and by any officer of the naval service authorized by law to convene general courts-martial.

Boards of investigation may be ordered by an officer empowered to convene a court of inquiry, by the commander of a division or larger force afloat, and by the senior officer present afloat or ashore.

4J3. Membership. The composition of a court of inquiry or a board of investigation both in regard to rank of members and the corps to which they belong, are regulated by the circumstances to be investigated.

A court of inquiry consists of *not more* than three officers as members and of a judge advocate.

A board of investigation ordinarily consists of three officers as members. A separate recorder may be appointed. If none is appointed, the junior member acts as the recorder in addition to his functions as member.

An investigation is composed of one officer.

4J4. When to be convened. If there is no doubt as to the facts of any particular incident or occurrence, and no reason why sworn testimony to facts fresh in the minds of witnesses should be preserved, a complete administrative report by the commander concerned will be fully as satisfactory as the record of a court of inquiry or of an investigation could be. But ordinarily, owing to legal sequels, the following should be covered by a court of inquiry or board of investigation: (a) a loss of life from accident or under peculiar or doubtful circumstances; (b) serious casualties to or deficiencies in ships; (c) loss or stranding of a ship of the United States Navy; (d) collision with a merchant ship.

4J5. Powers of courts of inquiry and boards of investigation. In general, the powers of a court of inquiry are comparable to those of a general court-martial as regards compelling the attendance of civilian witnesses. The proceedings of a court of inquiry may under certain conditions be evidence before courts-martial.

Except as stated above there is no vital difference between a court of inquiry and a board of investigation.

It is appropriate in closing this chapter on discipline and naval law to recall the following verse from the "Laws of the Navy," by Captain Ronald Hopwood, R.N.

Uncharted the rocks that surround thee,
Take heed that the channels thou learn,
Lest thy name serve to buoy for another
That shoal, the Courts-Martial Return.
Though Armour, the belt that protects her,
The ship bears the scar on her side;
It is well if the court acquit thee;
It were best hadst thou never been tried.

5

DUTIES OF A SHIP'S PERSONNEL

A. OFFICERS

5A1. Introduction. The complement of a ship is composed of such numbers, ranks, and ratings of officers and men as are necessary to fight the ship most efficiently. The Commanding Officer or Captain of the ship is, as his name implies, its executive head. Under him is the executive officer who is second in command and administers the routine organization of the ship and coordinates the activities of the various departments.

The administration of each portion of the ship's work is divided into departments, each under the supervision of a department head. Each head of a department has supervision over the officers who perform duties under him. It is often true that some of the officers will be under the supervision of several departments. For example, there are the deck division officers who are responsible to the damage control officer and first lieutenant for the upkeep of the parts of the ship assigned to them, and to the gunnery officer for the maintenance and operation of that part of the ship's battery to which their divisions are assigned.

In the following pages, the internal administrative organization of a battleship is outlined. Attention is called to the fact that modifications would be necessary to adapt such an organization to existing conditions on smaller vessels.

5A2. The Commanding Officer. The duties and responsibilities of the Commanding Officer are included in more than thirty closely printed pages in *Navy Regulations*. Many specific responsibilities are placed directly in his hands and he is solely responsible for his acts in carrying them out. The supervision of the conduct of all persons under his command is in his charge and should he not suppress unlawful activities or conduct, he is himself subject to punishment by court-martial. In the investigation of offenses and the assignment of punishments he cannot delegate his authority. He is required to have the "Articles for the Government of the Navy," which contain the provisions of law governing the disciplinary system in force in the Navy, published monthly to the crew.

The welfare and living conditions of the crew are the constant concern of the Commanding Officer. The medical officer assists him in maintaining the ship in sanitary condition, and provides for proper care and isolation in the case of infectious diseases. Provisions must be maintained and stored in proper condition, and precautions taken for their preservation.

The maintaining of the material readiness of the ship for war service is a duty of the Commanding Officer. He issues the necessary directions to his

executive officer who in turn, with the assistance of the various heads of departments, prepares and conducts the exercises and drills required to bring about proficiency. He is also responsible for the guarding of the security of material against compromise or sabotage.

A primary responsibility of the Commanding Officer at all times is the safety of the ship. This means specific orders regarding the handling, stowage, and use of ammunition; provisions for watertight integrity involving closing watertight doors, opening ports at sea, careful navigation, etc. While the navigator is charged with all the specific duties of ascertaining the position of the ship at all times, the Commanding Officer has the full responsibility in all matters of navigation. Other matters which pertain to the safety of the ship are the posting of proper lookouts, showing of required lights, observance of Rules of the Road to prevent collisions, and taking of soundings to check with the plotted position of the ship. While it is impossible for the Captain to attend to these matters personally, if these precautions are not observed and the ship comes to grief as a result, the blame nevertheless falls primarily on the Captain.

The training of personnel aboard ship is an important step toward attaining fighting efficiency. The instruction of officers and men is the responsibility of the Commanding Officer. The conviction of the Navy's outstanding educator of the last century, Admiral Stephen B. Luce, that the Navy should be an educational institution for all hands, is steadily materializing.

In the presence of the enemy or when approaching a strange ship, general quarters is sounded and the ship is made ready for battle. The Commanding Officer's battle station is that station from which he can fight the ship to the best advantage. It is a fact well-known to all, and backed by both custom and regulation, that, in the case of the loss of the ship, the Captain is the last to leave.

If the officer regularly ordered to command a ship is absent, disabled, relieved from duty, or detached without relief, the command devolves upon the line officer next in rank regularly attached to and on board the ship (exclusive of such officers as may be restricted to the performance of engineering duties only).

The Commanding Officer's position is quasijudicial. In fact, it is legislative, judicial, and executive. It is an awful and a complete power, and has been from time immemorial. It is obvious why this must be. Such great responsibility requires commensurate power. Hence it is essential to efficiency and discipline that a Commanding Officer should have the power to enforce prompt obedience to his orders.

5A3. The executive officer. The chief assistant to the Commanding Officer is the executive officer who is detailed as such by the Secretary of the Navy from officers of the line, exclusive of those restricted by law to the performance of engineering duties. He is the next ranking line officer aboard ship and the direct representative of the Commanding Officer in maintaining the military and general efficiency of the ship. As such representative, and in order that he may properly perform the duties imposed upon him, all heads of departments and other officers and all enlisted men on board ship are under his orders in all

matters pertaining to the operation and maintenance of the ship and to the preservation of order and discipline on board. The executive officer has no authority independent of the Commanding Officer and the details of his duties are regarded as execution of the Captain's orders. Responsibility for the personnel and for the ship's routine, efficiency, and discipline is largely in his hands.

The executive officer is required to be familiar with every part of the ship. With the assistance of the heads of departments he arranges and coordinates all ship's work, drills and exercises, personnel organization, policing of the ship, and inspections of the ship. He is charged with the maintenance of cleanliness, good order, efficiency, and the neat and trim appearance of the ship and crew. When on board ship, the executive officer is always on duty.

The executive officer keeps in close touch with all the activities of the ship and supervises the heads of departments in the performance of their duties, including the instruction of junior officers. The supervision of the training of all enlisted personnel is also in his hands. In small ships, the executive officer may perform the duties of navigator.

As personnel officer, the executive officer supervises the entries in all the crew's Service Records and is responsible for their correctness. All matters of discipline and conduct of the crew are investigated by him and reported to the Commanding Officer. The executive officer approves the liberty and leave lists for the crew.

The executive officer relieves the deck whenever all hands are called for any particular duty, exercise, or evolution, except at quarters and during action. He is not required to keep a watch but he may relieve the officer of the deck for short periods as a matter of accommodation.

If for any reason the executive officer is rendered incapable of performing the duties of his office, they devolve upon the line officer next in rank below him attached to and on board the ship (exclusive of such as are restricted to engineering duty and naval reserve officers not qualified for the performance of all deck duties afloat).

When the ship is cleared for action, the executive officer inspects it, receives reports from the various departments, and in turn reports to the Commanding Officer that the ship is, in all respects, ready. The executive officer is the relief commanding officer in case the Commanding Officer is incapacitated and, in battle, has a station removed from the Commanding Officer, usually in the secondary ship control station. Communication is maintained with the primary control station. After battle, the executive officer makes a detailed report to the Commanding Officer, citing all details of the action observed, together with a statement of the conduct of subordinates in praise or censure as the case may be.

5A4. Departments and their heads. Officers are detailed by the Chief of Naval Personnel as heads of departments on board ship. These officers serve as the principal aides or assistants to the executive officer in the coordination of the ship's work, and drills and exercise of the crew as a whole, especially in connection with those exercises pertaining to their particular department.

The departments on a battleship are gunnery, navigation, engineering, construction, medical, and supply. (Communications, though not officially a department, is frequently so considered.) In the performance of their duties, department heads have the general right, at all proper times, to confer directly with the Commanding Officer.

Regulations prescribe thoroughly and completely the duties and responsibilities of each department head. These regulations are further supplemented by the various bureau manuals and pamphlets.

Efficient department administration strengthens the ship in battle. It is dependent in no small part upon the efficiency of each of the department heads, who are responsible to the Captain and solely to him, although usually through the executive officer, for the effective functioning of their respective departments. It is the Captain, however, who has the full responsibility to higher authority for the total results of the work of all departments.

One or more divisions of the ship's company is assigned to each department. Each division is in the charge of a division officer. While departmental organization exists on all ships, on small vessels it is usually necessary to combine two or more departments. Under these circumstances, the Commanding Officer and the executive officer must sometimes assume the duties of department heads. Since there are fewer men on smaller ships, the number of divisions is reduced accordingly.

5A5. The gunnery officer. The gunnery officer is the head of the gunnery department of the ship and is detailed as such by the Chief of Naval Personnel. He is senior to all watch and division officers, and has as his assistants the assistant fire control officer, the officers of the various gun divisions, the officers in the fire control division, the (chief) gunner, and the officers assigned to aviation and torpedo duties.

If the regularly assigned gunnery officer is for any reason incapable of performing the duties of his office, the Commanding Officer may designate another officer in his command to carry out his duties. If no regular gunnery officer has been designated for the ship, the Commanding Officer may assign an officer of his command to act as gunnery officer.

The gunnery officer has supervision over and is responsible for the entire ordnance equipment aboard ship. He is charged with the efficiency of all armament and appurtenances thereto, the cleanliness and good condition of all ammunition stowage spaces and ordnance workshops. He is responsible for the proper stowage and care of all explosives and also for the necessary inspections, examinations, and tests connected therewith.

The instructions in *Navy Regulations* are detailed regarding general handling of ammunition, projectiles, and powder, testing and care of smokeless powder, safety precautions to be observed in its handling and preservation, and strict observance of safety rules regarding magazines. The gunnery officer is responsible for compliance with these instructions. The gunnery officer also has the control and supervision of personnel and material of the torpedo and aviation divisions.

The gunnery officer is in charge of the gunnery training of the crew and assists the executive officer in arranging and coordinating the ship's drills and exercises of the crew, especially in connection with fire control, and the drill, exercise, and efficiency of the armament as a whole. His aim is to have his batteries ready to open fire quickly, to hit early, and to keep on hitting.

In battle, the gunnery officer's station is normally the primary main battery control.

5A6. The navigating officer. The navigating officer, or navigator, who is senior to all watch and division officers, is detailed as such by the Chief of Naval Personnel. He is head of the navigation department and performs the navigation duties. He is responsible for fixing the position of the ship at all times and for its safe navigation. He must study charts, sailing directions, and other sources of navigational information and keep all of these aids up to date. He maintains an official record of navigation. Usually an ensign is assigned as his assistant. *Navy Regulations* (article 1009) makes the navigating officer directly responsible to the Commanding Officer in his navigational duties as follows:

The navigating officer shall receive all orders relating to his navigating duties directly from the commanding officer, and shall make all reports in connection therewith directly to the commanding officer.

The navigator is responsible for all equipment (except electrical) pertaining to the navigation of the ship. Included are the steering gear, lead lines and sounding gear, gyro and magnetic compasses, chronometers and clocks, as well as instruments used in navigation, such as sextants, azimuth circles, stadiometers, and binoculars. He is also responsible for all compartments, offices, and store-rooms assigned to the navigation division.

The preparation and care of the ship's log as well as the instruction of the watch officers in the keeping of the log are the responsibility of the navigator. He generally acts as the ship's tactical officer, and as instructor to the watch officers in studying tactical publications. He relieves the officer of the deck at general drills and usually at quarters. The navigator is usually the senior member of the summary court-martial and the hull board. (The hull board consists of three officers whose duty it is to examine and report upon the condition of every part of the ship as regards corrosion or deterioration and to make such recommendations as are pertinent.) He is often placed in charge of the ship's library and is usually the ship's educational officer. Sometimes he acts as deck court officer and frequently he serves as survey officer, acting on requests for surveys of materials.

In every activity in which the ship engages, the navigator plays an important part. It is the navigator who directs the course of the ship so that she will be in the right spot at the right time to place an enemy target under the fire of her guns. The navigator during battle becomes the ship control officer, relieving the officer of the deck. As such, in his activities during battle and cruising, the navigator is assisted by a small but highly skilled organization consisting of all the aides assigned to the officer of the deck.

Modern warfare has made the conning tower impracticable as a conning station. The Captain and the navigator remain topside in a station partially protected against splinters but with unobstructed all-around and overhead vision. From here they can control and fight the ship by means of direct communication to the conning tower and other stations throughout the ship.

5A7. The engineer officer. The engineer officer of the ship, detailed as such by the Chief of Naval Personnel, is senior to all watch and division officers aboard ship. Commonly known as the *chief engineer*, his responsibilities include the care, maintenance, and operation of all machinery except certain radio, sound, and visual signaling apparatus. He is charged with all electrical machinery, equipment, and workshops as well as with the upkeep and cleanliness of the firerooms and engine rooms and of all compartments, shaft alleys, store-rooms, workshops, and machinery shops assigned to the engineer division. He is responsible for keeping the engineering, operational, and maintenance records.

The engineer officer personally supervises the operation of the machinery in battle.

The training of his personnel, both officer and enlisted, is another of the tasks assigned the engineer officer. Of particular importance is instruction in the principles of damage control, particularly where they apply to the engineering department.

The engineer officer must keep the Commanding Officer informed at all times as to the condition of the machinery and electric plant and of all repairs that may be needed. War increases the importance of close cooperation between the Captain and the engineer officer. A steady exchange of information must be maintained between them.

5A8. The damage control officer and first lieutenant. On battleships, cruisers, and aircraft carriers an officer is detailed to duty as damage control officer and first lieutenant by the Chief of Naval Personnel; on smaller ships the selection is made by the Commanding Officer. He is the construction officer of the ship and is head of the construction department. He is senior to all watch and division officers.

Normally, on large combat ships, this officer has two assistants: the assistant damage control officer and the assistant first lieutenant. Other officers who assist him are the deck division officers, the boatswain, the carpenter, and the officers assigned as assistants for damage control. As the representative of the Commanding Officer, he has the necessary authority to enable him to carry out his duties. (In the days of John Paul Jones the only officers a ship had were a Captain and several lieutenants. The Captain's principal assistant in those days was called the First Lieutenant.)

The damage control officer and first lieutenant has charge of all equipage, equipment, stores, and supplies under the cognizance of the Bureau of Ships, assigned or issued to his department by the supply officer.

This officer is responsible for the cleanliness, good order, and neat and trim appearance of the ship as a whole, and all parts thereof. He is even responsible

for the cleanliness and good condition of all mess gear issued to the crew and makes frequent inspections not only of this gear but of all mess tables, chests, and lockers. Tact is a helpful trait to be desired by this officer for he must work in all parts of the ship and have frequent contacts with all departments. Cleanliness of the ship, even in time of war, cannot be neglected. Then, more than ever, when ships are crowded, battened down as much as is practicable, and occupied by men who are tired out, they must be continuously maintained in the highest state of cleanliness for sanitation, reduction of fire hazards, and general well-being of the personnel.

The damage control officer and first lieutenant is particularly concerned with the coordination of all departments for damage control and for placing the ship in material condition for battle. He assists the executive officer in arranging the ship's work, drills, and exercises of the crew as a whole.

On some ships, he gives an occasional lecture to the ship's officers, explaining the various damage control problems the ship may encounter, together with the measures that will be employed in each case.

In battle, when damage occurs which is beyond the control of the men at the scene, he must order repair parties to be assigned to the job. Torn or punctured bulkheads may have to be shored up with timbers, planking, plating, collision mats, and even bedding. Emergency cutting and welding, pipe repairs, electrical repairs, and even major operations on the hull may be undertaken under his supervision.

In battle, the regular station of the damage control officer and first lieutenant is in the central station in general charge of the organization of damage control and repair parties. In case of serious fire or other casualty he may proceed to the spot, assume charge, or take such action as may be necessary.

5A9. The communication officer. On board battleships, aircraft carriers, cruisers, destroyers, and in other ships where necessary, a line officer is assigned to duty as communication officer. The communication officer is not a head of a department, since communications in a ship's organization is, strictly speaking, a part of the navigation department; nevertheless his duties are such that he is frequently so considered. On large ships he has three assistants: radio officer, signal officer, and ship's secretary. In the smaller ships he may have to hold down all three jobs—or some other officer may have to double as communication officer.

The communication officer is responsible for the operation and maintenance of the radio and sound apparatus as well as all visual signaling apparatus and equipment. Also he is responsible for the preparation of all communication records and reports and is charged with the procurement, custody, distribution, and reports of all confidential and secret publications issued to the ship. He may or may not be the ship's mail censor but he and some of his assistants will, no doubt, be required to serve in the capacity of assistant censors.

In battle, the communication officer's station is, according to *Regulations*, where the "commanding officer may designate and where he can best supervise and



Figure 10. The "shack" or Communication Office, is the nerve center of the ship. Here, among the maze of cables, typewriters, senders, and receivers, contact is maintained with other ships of the fleet, with bases and intership phones.

control the conduct of external communications." This, in practice, is the primary communications office, the code room, or on the signal bridge.

"War is an affair of getting news, interpreting it, and acting upon it." Communications gets the news and sends it out. Nowhere are the tremendous advances made during the last few years in communications more evident than on a modern man-of-war. In no phase of war activity are caution, accuracy, and speed more vital than in this field. A delayed or compromised dispatch may lead to the loss of a ship, a convoy, or a fleet.

5A10. The medical officer. The medical officer of the ship, a staff corps officer, is the head of the medical department. In actual practice the Bureau of Medicine and Surgery nominates the officer and he is detailed for duty by the Bureau of Naval Personnel. He has charge of all material and stores aboard under the cognizance of the Bureau of Medicine and Surgery.

He advises the Commanding Officer in regard to matters affecting the physical fitness of all personnel, and is in charge of the treatment and care of the sick and wounded. The medical officer indorses upon the record of every summary court-martial, when the sentence involves confinement of a period exceeding ten days on diminished rations, or on bread and water, his opinion as to whether

the infliction of such a sentence would produce serious injury to the health of the person sentenced.

The medical officer inspects, as to quality, all fresh provisions delivered to the ship. Before cooking or drinking water is brought on board from shore, he must investigate its source, test it, and report at once if any doubt exists as to its purity. He must make inspections of cells or other places of confinement and of all prisoners, reporting the results to the Commanding Officer. The medical officer, who works in close cooperation with the first lieutenant, accompanies the latter on his weekly inspections of living spaces and storerooms. Before leaving port, a bill of health must be procured, and upon arrival in port the medical officer must be prepared to receive the health officer, to present a bill of health, and to answer any questions concerning the sanitary conditions of the ship.

In battle, the medical officer is in charge of the primary dressing station, often established in the wardroom.

When Marine landing parties go ashore, frequently they are accompanied by medical officers and hospital corpsmen. Flight surgeons are assigned to aircraft squadrons attached to carriers. These flying officers have had post-graduate training in flight surgery and aviation medicine.

In the days of sail most of the wounds sustained in battle resulted from wooden splinters or from small arms, firearms, and such weapons as cutlasses, bayonets, and boarding pikes. Today, because of the more tenacious character of the material of which the ship is made, less splinters are produced, and, because of the numerous compartments, the splinters do not fly far. On the other hand, the explosion of a shell in the closed compartment of the modern man-of-war causes terrific destruction resulting in fractures, internal injuries, and severe burns. In the present war many burns are flash burns, caused by the temporary but intense heat from exploding bombs or torpedoes.

When a ship is at sea today in time of battle, the closing of the watertight doors isolates the persons in these compartments and makes communication difficult or impossible. The wounded, therefore, must depend, to a great extent, on first-aid dressings applied by their immediate shipmates; hence in modern navies great stress is laid upon first aid and upon the provision of first-aid kits, shell dressings, tourniquets, and similar appliances in the turrets, gun stations, and various other parts of the ship.

During a lull in the battle, when it may be possible to open some of the watertight doors, the wounded are collected at the battle dressing stations where further first aid is administered. (The *Wasp* was divided into six battle dressing stations located in different sections of the ship so that any one station might function independently in the event of the complete destruction of any or all of the rest.) It is to these stations that doctors go when general quarters is sounded. The senior medical officer sets up central operating rooms for the care of seriously wounded until such time as they are transferred to a hospital ship or shore station.

The medical officer is likely to combine the functions of Kipling's Gunga Din,

of Florence Nightingale, the Good Samaritan, a wise counselor, and the most skilled surgeon science has produced. He frequently does so at the cost of his own life.

5A11. The supply officer. The supply officer of the ship is the senior officer of the Supply Corps attached thereto and is the head of the supply department. He is nominated by the Bureau of Supplies and Accounts and is detailed by the Bureau of Naval Personnel. His general duties are set forth in *Navy Regulations* (article 1210 (1)).

The supply officer of a ship shall have charge of the accounts of the personnel, of the purchasing of stores and material for the ship, and of the disbursement of funds in connection with the general operation of the ship.

He has custody of all stores for which he renders account, excepting equipage in use, bunker fuel, and such other bulky supplies as may be in the physical custody of other departments. He is responsible for the cleanliness and good condition of the galley, bakery, issuing room, and storerooms under his charge.

All provisions delivered on board by a contractor are inspected as to quality by an officer of the Supply Corps, or by another officer designated by the Captain. This officer must personally ascertain the exact quantity of each article received and certify the fact over his official signature. (The officer of the deck must make an entry in the ship's log showing the contractor's name, the exact quantity of each article delivered, and the name of the officer making the inspection.)

The ships' store is in the charge of the supply officer. Clothing and small stores are issued at such times as may be directed by the Commanding Officer. The ship's service store, however, is not under the cognizance of the supply officer. The ship's service officer is appointed by the Commanding Officer and is an officer who is not charged with accountability for government funds.

Two officer assistants may be assigned to the supply officer, one for disbursing and one for general stores. In battle, the supply officer may have one of several duties; for example, assistant in fire control, battery officer, antiaircraft control, member of coding board, etc.

5A12. The air officer. On aircraft carriers an officer is designated by the Chief of Naval Personnel as an air officer. However, on ships to which no officer is ordered as head of the air department—such as a battleship or cruiser—the gunnery officer has certain responsibilities in connection with the planes and the catapults. As was pointed out in the discussion of the gunnery officer, the aviation personnel aboard such a ship are in the gunnery department for purposes of administration.

The air officer is responsible to the Commanding Officer for the administration of the air department, including the embarked squadrons which make up the air group. He is responsible for the maintenance and repair of all spaces, materials, and apparatus under the cognizance of the air department and squadrons. The organization of the air departments differs somewhat from carrier to carrier.

When embarked, the air group commander acts as assistant to the air officer



Figure 11. Heart of the supply system aboard a battleship is the office of the supply officer and his staff.

in the planning and conduct of air operations. Squadron commanders act through the group commander as assistants to the air officer in the operation of their respective squadrons.

5A13. The engineer and repair officer. The engineer and repair department is a separate department maintained on such ships as destroyer tenders, submarine tenders, and other ships of the tender class for the upkeep and repair of ships based on the tender. While it is a part of the ship's organization, it is operated as an entirely separate unit, separate even from the ship's own engineering department.

It is administered by the engineer and repair officer, who is usually senior to the ship's engineer officer. The repair officer is wholly responsible for any maintenance, repair, and overhaul requested by the Commanding Officers of the ships based on the tender.

Ships such as destroyers and submarines have only limited repair facilities aboard. Hence the necessity for the tender which, through the facilities of its engineering and repair department, is equipped to perform such major repairs as patching up hulls, rebuilding a ship's bridge, repairing decks, or repairing and replacing depth charges and torpedoes.

5A14. Chaplain. Since the earliest days of the United States Navy, chaplains have been attached to our warships. Today they are assigned to battleships, aircraft carriers, heavy and light cruisers, transports, hospital ships, and auxiliary vessels which serve destroyers, seaplanes, and submarines.

The duties of the chaplain are primarily religious but additional duties which tend to promote the mental, moral, and physical welfare of the personnel are often performed by him.

Chaplains conduct divine services each Sunday, weather and other circumstances permitting; they officiate at baptisms, marriages, and funerals; visit the sick and imprisoned; provide religious instructions; and counsel with personnel in matters pertaining to their spiritual life.

In addition to his religious duties, the chaplain may supervise the ship's library and the ship's paper. During battle, chaplains are usually assigned to duty at a dressing station with the senior medical officer, or given a "roving" assignment. Commanding officers frequently call on the chaplain to give an account of the battle over the loudspeaker, and on many ships of the fleet, a prayer before battle is read by the chaplain over the public address system.

Since the beginning of this war, Navy chaplains have been in the thick of battle. When the Second Marine Division invaded the Gilbert Islands in 1943, ten chaplains went ashore with the troops. A total of 26 chaplains have been decorated for heroism during combat and 22 have been awarded the Purple Heart (1 January 1945).

As liaison between the military and the home front, the chaplain is frequently called upon to cooperate with social and welfare organizations, administer Navy Relief, and correspond with relatives and friends of naval personnel in matters which involve dependents, deaths, illnesses, and domestic problems.

It is a tradition of the service that the chaplain shall be the spiritual and moral counselor of his ship, and as such he is always available when officers or men wish to seek his advice on problems which vary from affairs of the heart to requests for a loan from Navy Relief.

In the early days of our Navy, the chaplains, who were not always ordained, in addition to holding divine services, were schoolmasters with the special assignment of teaching navigation to young officers and midshipmen. Today they assist in the educational, athletic, and recreational programs.

5A15. Recognition officer. Early in the present war the need was felt for men trained in aircraft and surface craft recognition who would be able to identify planes and ships and who could also teach others to identify them. It has been of vital importance to the Navy that men in key positions aboard ship (such as gunner's mates, fire controlmen, and men on the bridge) be able to spot planes and ships as friend or enemy before firing.

Recognition officers are being assigned therefore to all larger ships such as battleships, cruisers, aircraft carriers, destroyers, auxiliary craft, and destroyer escorts. Their purpose is twofold: (1) They are charged with instructing ship personnel in aircraft and surface craft recognition. (2) They may be called upon at any time to aid in spotting and identifying planes and ships, and to perform any other duty which the Commanding Officer may assign. Some may assist in training lookouts.

B. DIVISIONS

5B1. Variations in size and number of divisions. There is no standard divisional organization for Navy ships. The number of divisions varies according to the size, type, and complement of the ship. The complement of the divisions on an individual ship may vary in number from five or six members in one division to a hundred or more in another.

On small ships, one officer may hold several positions and heads of departments seldom have assistants. There are fewer divisions and the complement of each is limited by the smaller complement of enlisted men.

The division officers. A division officer, according to *Navy Regulations*, is one regularly assigned to command a division. The Commanding Officer makes these assignments in such a manner as he believes to be most conducive to the efficiency of the ship as a whole. The division officers report to the heads of departments.

The division officers' duties are many and varied. *Navy Regulations* require that they execute all methods prescribed by, and all orders received from, their superiors. The division officers are responsible for the care, preservation, and manipulation of the part of the ship assigned to their division and of all material, stores, supplies, and articles of outfit issued to their division. They must keep a book containing correct copies of the ship's bills, and other written instructions concerning the duties of the ship. Whenever necessary, division officers have prepared and signed memorandum requisitions for clothing and small stores.

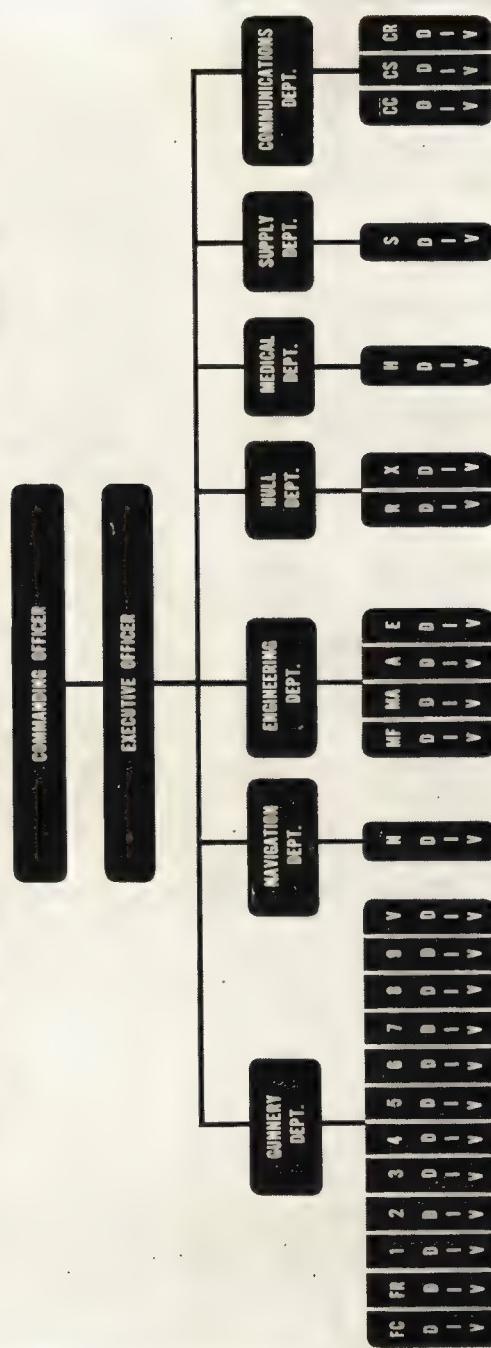


Figure 12. Battleship organization chart.

DUTIES OF A SHIP'S PERSONNEL

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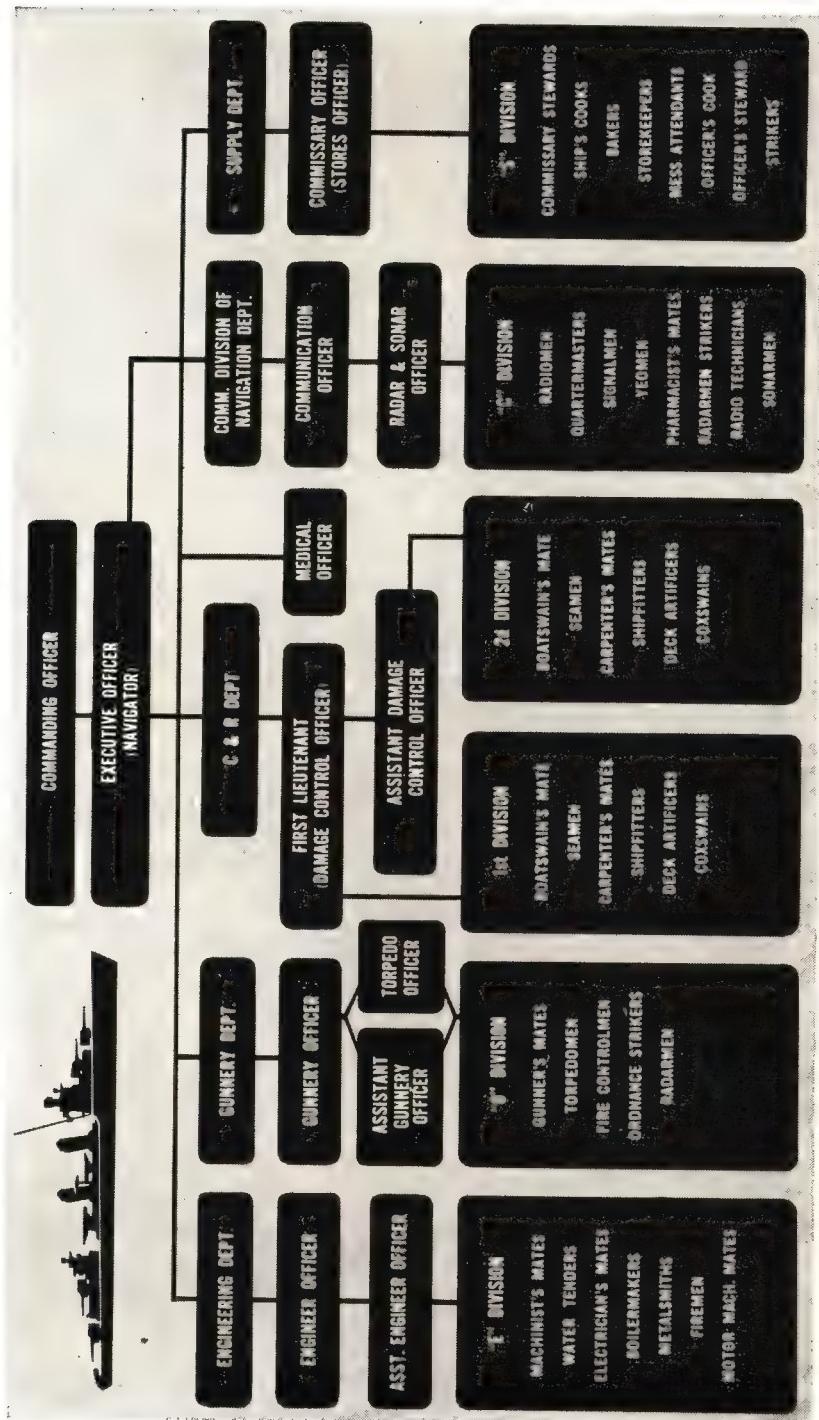


Figure 13. *Typical organization for a 1600-ton destroyer.*

Personal leadership is important to the division officer. He has frequent direct contact with his men and must see to it that they perform with diligence all duties assigned them. He personally instructs the men of his division at all prescribed drills and during exercise must follow the directions set forth in official instructions and take the necessary precautions to avoid accidents. Especially in training his men is the division officer's personal leadership manifest, and his effectiveness will be measured by the extent to which he has fulfilled his main duty: preparation of his men for battle.

5B2. Combat Information Center. The Combat Information Center (C.I.C.) is, briefly, an agency for the collection, evaluation, and distribution of combat information, and for facilitating the use of that information. With the continued development of radar and other detection equipment, the need for a co-ordinating center on board ship has become more and more acute. C.I.C. is neither a department nor a division, but rather is an agency that coordinates the activities of both departments and divisions during preparations for battle and in actual battle. C.I.C., which is now found on most major combat vessels, is the sensory center of the ship, the place in which tactical information is gathered and evaluated, and action coordinated.

C.I.C. is specifically charged with the responsibility of gathering all possible information concerning friendly or enemy ships or aircraft within range of the equipment, evaluating this information, delivering parts of the evaluated information to appropriate stations aboard ship, and controlling tactical units. In addition, C.I.C. must be able to take over control of part or parts of the ship as directed by the Captain.

During an engagement the Captain is besieged with a vast number of informational items, each of which must be weighed individually to determine whether it should be used, discarded, or mentally filed for future reference. The C.I.C. assists the Captain in carrying out his responsibilities, by filtering and evaluating nearly all incoming information. The Captain is given the required data as he needs it, and thus is free to concentrate on his decisions and carry the burden of command.

C.I.C. is manned by a trained C.I.C. team consisting both of officers and enlisted personnel. The size and composition of the teams vary according to the information-gathering equipment available. On many ships the general quarters station of the executive officer is in C.I.C.

5B3. Marines aboard ship. Under normal conditions, Marines aboard larger ships form a separate division. Today, Marine detachments of varying size serve on many types of ships—battleships, carriers, heavy and light cruisers, and troop transports. Each Marine has volunteered, worked, and trained for the privilege of becoming a "seagoing Marine." Marines are manning secondary battery weapons and serving as gun crews on antiaircraft weapons. They specialize on the ack-ack weapons. In addition, marines serve as orderlies for the ship's captain or other high-ranking naval officers aboard, and they also act as security guards while at sea or in port.



Figure 14. Destination Palau. Marines are given final instructions aboard ship before hitting the beach.

Figure 15. Watch, Quarter, and Station Bill USS SC—
 (SC complement of 24 men allowed)

WATCH BILLET	NAME	RATE		CONDITION ONE	CONDITION TWO	CONDITION MIKE	FIRE	MAN OVER- BOARD AND RESCUE OF SURVIVORS	ABANDON- SHIP	SPECIAL SEA DETAIL	Duty Section Remain on Watch at All General Drills	BOARDING AND SAL- VAGE FIRE AND RES- CUE PLANE CRASH	CLEANING STATIONS
		ALLOWED	ACTUAL										
See Separate Bill for Damage Control													
111		CBM		In charge damage control	QM—SM and eng. control	In charge ready gun	In charge axe and tools	In charge axe and boat hook	In charge axe and tools	#1 l.r.	In charge fwd.	In charge	In charge
112		GM3/c		MG No. 1 and damage control	Ready gun and lookout	Ready gun and lookout	Rifle and Amm.	Death charges handy billy	Death charges handy billy	#1 l.r.	Very's Gaff/colors pistol set D.C. on salt	Tommy gun	Ordnance
113		S1/c		Helm	Helm	Helm	Nearest hose	Swimmer	Collision mat	#1 l.r.	Helms	G life jackets	Fwd. crews qtrs. and head
114		RM3/c		MG No. 1	Radio	Radio	First Aid Kit	Set cond. "affirm." papers	#1 l.r. con-	Lines fwd.	Fire ext.	Radio shack	
115		MOMM1/c		Eng. Room	Eng. room	Eng. room	F. and B. pump	Grapnel	Set cond. "affirm." mattress	Eng. room	Fire and rescue chest	Eng. room	
116		MOMM2/c		Main gun	Ready gun and lookout	Ready gun and lookout	Nearest plug handy billy	Handy	#1 l.r. re-lease life raft	Lines fwd.	2 life rings	Fwd. crews qtrs. and head	
117		F2/c		MG No. 1	Sound	Sound	Liferaft and net	Shores and wedges	#1 l.r. cut wherry gripes	Lines fwd.	Fire ext.	Mess hall.	
118		Y2/c		Sbd.	Radar—night lookout	Radar—night lookout	Heaving line	Collision mat	#1 l.r. ship's Lookout records	Blankets	Blankets	Ship's office	
THIRD SECTION													
131		QM3/c		QM—Talker	QM—SM and eng. control	QM—SM and eng. control	In charge axe and tools	In charge axe and boat hook	In charge axe and tools	#31.r. chart sextant	Quarter master	Bridge	
132		S1/c		Depth chg. racks and talker	Sound	Depth chg. racks and talker	Fire ext.	Life raft and net	Shores and wedges	#3 l.r. cut wherry gripes	Lines aft	Fire ext.	Mess hall.
133		MOMM2/c		Main gun and damage control	Ready gun and lookout	Ready gun and lookout	Nearest plug handy billy	Swimmer	Handy	#3 l.r.	Lines fwd.	2 life rings	Fwd. crews qtrs. and head
134		MA2/c		Galley and mess	Helm	Helm	Nearest Hose	Collision mat	#3 l.r. food Jack	6 life jackets	Officers country	Officers country	and head

Figure 15—Continued

235	Cox	In charge main gun	Ready gun	Muster rifle and handy billy	#3 l.r.	In charge aft	Tommy gun	Aft crews qtrs.
236	EM2/c	Depth chg. racks and dam. control talker	Depth chg. night lookout—day	Charges handy billy	#3 l.r.	Lookout	Blankets	Eng. room
237	RM1/c	Radio and amm. party	Radio	Heaving line	#3 l.r.			
Port Watch	MOMM1/c	MG No. 2	Ready gun	First aid kit	#3 l.r.; continental mattress	Radio	Fire ext.	Radio shack
		and lookout	Eng. room	2 buckets sand	#3 l.r.; continental mattress			
			F. and B. pump	Grapnel	F. and B. pump	Bridge eng. controls	Fire and rescue chest	Eng. room
SECOND SECTION								
221	GM2/c	GM and damage control	Ready gun	Rifle and amm.	#21.r. small Staff arms set DC colors on safe			Tommy gun Ordnance
222	SM2/c	Signals	and lookout	Depth charges handy billy	#21.r. flags			
223	SI/c	QM—SM and eng. controls	QM—SM and eng. controls	In charge axe and tools	Blinker gun	Signals		Signal bridge
224	RDM2/c	Helm	Helm	Swimmer mat	#21.r.			
225	SOM2/c	Radar	night lookout—day	2 buckets sand	Collision mat	Lines aft		
226	F1/c	Sound	Sound	Heaving line	Radar			Mess hall
227	SCI/c	Main gun	Ready gun	Life raft and net	Sound			
228	CMoMM	lookout	and lookout	Shores and wedges				
		MG No. 2	Galley and mess	2 life rings with lines				
		and mess	Galley and mess	Handy billy	#21.r. release life raft			
		Eng. room	Eng. room	Fire ext.	#21.r. food	Lines aft		
			F. and B. pump	First aid kit	Set cond. affirm			
				Grapnel	mattress			
					F. and B. pump			
						Eng. room	Fire and rescue chest	In charge eng. room

Radiomen—Stand watch and watch at conditions II and III-M.

Marines aboard ship must be ready to serve as landing parties, and if the ship captures an enemy vessel, they join the boarding party and prize crew. All Marines, except orderlies, turn out with the bluejackets to handle ammunition when it is brought aboard, generally assist in provisioning the ship, and square away their own compartment. In port, Marine sentries guard the ship's gangways.

C. THE SHIP'S ORGANIZATION

5C1. The Ship's Organization Book. Every officer and man has his place in the operation of the ship in whatever activity it may be engaged. Prior to commissioning, there is prepared aboard each ship a Ship's Organization Book, a Battle Bill, and a Watch, Quarter, and Station Bill detailing the assignment of officers and men in the performance of their duties.

The Ship's Organization Book is a general directive and has the force of regulations. In addition to outlining the ship's administrative organization, it contains such bills as the *Fire Bill*, *Collision Bill*, *Abandon Ship Bill*, *Fueling Bill*, *Visit and Search Bill*, *Towing Ship Bill*, and other bills necessary to provide for any known contingency.

5C2. The Battle Bill. The Battle Bill lists all the stations necessary to fight the ship, and the duties of the men at each station. Consideration in making these assignments is given to the particular qualifications of the men concerned, placing them where they are best fitted to serve. The assignment designates not only duties, but indicates the succession to command in each station.

There are three conditions of readiness for battle or for simulated war operations. The one in operation depends on the anticipated danger. Each is defined as follows:

Condition 3.—The probabilities of an attack are rather remote and the crew may be standing the customary peacetime watches.

Condition 2.—A surprise attack may take place at any time by aircraft, surface ships, or submarines.

Condition 1.—An attack is imminent. Every officer and man from the Captain on down is at his general quarters station.

5C3. Watch, Quarter, and Station Bill. Based on the Battle Bill, Watch, Quarter and Station Bills are prepared. Men are generally berthed and assigned training stations adjacent to their battle stations. The former practice of segregating the crew by like ratings and duties has been done away with, on the principle that damage to a certain part of the ship might wipe out all the technicians of a particular branch. Division officers prepare complete and detailed station bills and when approved, these are posted in a prominent place in the division's part of the ship. The station bill shows the name, rate, billet number, locker number, etc., of each man in the division. In addition, it indicates his battle station (Conditions 1, 2, and 3), fire station, fire and rescue station, collision station, abandon ship station (with equipment to be provided), and special station for getting underway and anchoring, his sea watch station, port watch station, cleaning station.



Figure 16. Chief petty officers of the U.S.S. Iowa congregate in their mess.



Figure 17. Chow line. The men are served cafeteria style.

5C4. Watches, mess arrangements, and sleeping quarters. There are three other important parts to a ship's organization: namely, the watches, the mess arrangements, and the sleeping quarters both for officers and enlisted personnel. Every officer and enlisted man except the Commanding Officer and the executive officer is placed in a watch section. Each section is approximately equal not only in numbers but also in the experience and special qualifications of its members. On large ships there are four watch sections; the 1st and 3rd sections comprise the starboard watch, and the 2nd and 4th sections make up the port watch. On destroyers and smaller ships there are three watch sections. Under normal peacetime conditions at sea, one of the sections of the watch will be the duty section and will furnish all watch-standers. The sections not on watch will engage in the ship's work and in drills. In wartime, the watch-standing schedule varies with the existing conditions. Under battle conditions, the ship will be at general quarters and all officers and men will have an assigned station. In port after working hours (usually from 1600 to 0800), the watch not having the day's duty will have permission to go on liberty. The general practice is to have at least one-half the personnel on board at all times, although this also varies with conditions. For instance, a ship in drydock would not need half the personnel on board; while in port in the battle area, most of the personnel would be required to stay aboard.

Battleships normally have five different messes. (Enlisted men are furnished their food by the Government, whereas officers must pay for their food since they are paid a subsistence allowance to cover the cost of meals.) These messes are, in general, as follows:

Cabin mess—for the Captain.

Wardroom mess—for all officers of the rank of ensign and above.

Warrant officers' mess—for all warrant and chief warrant officers (sometimes combined with wardroom mess).

Chief petty officers' mess—for all chief petty officers.

General mess—for all enlisted men except chief petty officers.

On board smaller vessels, these messes are combined; for example, on a destroyer there would be a wardroom mess, a chief petty officers' mess, and a general mess.

The space provided for the officers' living quarters is usually located near the wardroom, so this section is called officers' country. Senior officers, where accommodations permit, are assigned individual staterooms. Junior officers share staterooms with one or more officers or are assigned to a bunkroom. The warrant officers are usually furnished accommodations similar to those of junior officers, and the chief petty officers are bunked together in separate compartments. The enlisted men are bunked in large compartments containing tiered bunks and metal lockers.

6

TYPES AND CHARACTERISTICS OF NAVAL VESSELS —PART I

A. INTRODUCTION

6A1. General. While the United States had been adding to its fleet from time to time since the early nineteen thirties, it was not until the so-called Two-Ocean Navy Bill became law on 19 July 1940 that effective steps were taken to prepare for possible entry into war. In round numbers, provision for a "two-ocean Navy" meant an increase of about 70 percent in our combat tonnage—the largest single building program ever undertaken by the United States or any other country.

Upon the outbreak of war in Europe in September 1939, the Navy Department initiated expansion of naval shipbuilding facilities in private yards and in navy yards. By July 1940, when the two-ocean Navy was authorized, the program for expanding shipbuilding facilities was well started, and it continued thereafter at an accelerated rate until the early part of 1943. The problem became not merely one of expanding shipyards, but of expanding the manufacturing capacity of industry as a whole to meet the needs of the Navy shipbuilding program.

Today, the United States Navy is by far the strongest in the world. In the amount of tonnage constructed, in the quality of our ships, and in the diversity of types which we have created, the record is one of unparalleled achievement. The young officer may, with pride and profit, familiarize himself with the ships of this great new Navy.

6A2. Factors in naval construction. In the construction of any ship, certain factors must be considered: (1) armament, (2) protection, (3) speed, (4) seaworthiness, (5) stability, (6) maneuverability, and (7) cruising range.

Armament comprises the weapons which are employed to inflict damage upon the enemy, and is thus the gauge by which the offensive power of the ship is measured. Armament includes main battery guns, secondary battery guns, anti-aircraft guns (secondary battery and heavy AA guns may be combined through the medium of employing double-purpose guns), torpedoes, depth charges, and such planes as may be used for torpedo attacks, bombing or strafing. *Protection* comprises those features which are provided to defeat or minimize the effects of the enemy's weapons. Included in this category are such protective installations as horizontal and vertical armor, internal subdivision by longitudinal (found in large ships only) and transverse bulkheads for limiting the spread

of flooding resulting from damage. Torpedo defense systems are also found in ships of large displacement. *Speed* is the characteristic which is determined by the shape of the ship underwater and the power and efficiency of the propelling plant.

Seaworthiness is the term used to describe the capability of a ship to operate at sea in all the kinds of wind, weather, and seas likely to be encountered. It is a function of such factors as stability, size, and freeboard. *Stability* is the term used to describe the ability of the vessel to return to an upright position when heeled over by an external force, and is a partial measure of the ship's ability to absorb punishment involving underwater damage and flooding. In addition, stability has an important influence on the period of roll which, to some extent, determined the suitability of any given vessel as a gun platform. *Maneuverability* is the characteristic which permits rapid changes of course and speed and includes the ability to turn in a small diameter. *Cruising range* is the ability to remain at sea for long periods of time and traverse large distances. It is determined by fuel capacity, fresh water capacity, evaporator capacity, efficiency of the propelling plant with respect to fuel consumption, and last but not least, provision capacity including refrigerated stores.

It is obvious that these qualities are not independent of each other. For example, a change in speed requirements will affect considerably the cruising range. Heavier armor, on the other hand, will reduce the proportion of weight which can be used for machinery, and, hence, will tend to reduce the potential speed of the ship. The designer of every ship tries to incorporate as many of these features as possible, in keeping with the general use to which the particular ship or type of ship will be put. Battleships, aircraft carriers, cruisers, and destroyers all represent a compromise in which most of these features are present in varying degrees. Submarines are far more specialized and sacrifice one or more of these qualities for some special function or quality. The modern high speed battleships and aircraft carriers represent the nearest approach to the ideal combination of all characteristics necessary to the most effective warship.

B. BATTLESHIPS (BB)

6B1. Purpose. The battleship, which has been given the arbitrary designation "BB," is built to defeat the most powerful craft that the enemy can take to sea. It is expected to combine the greatest amount of offensive and defensive power possible in a single vessel. In the past, it has been considered the principal ship of the Fleet and though the aircraft carrier has to some extent challenged the preeminence of the BB, recent battle experience has tended to show that the two types supplement rather than replace each other as the major units of a modern fleet. The modern battleships combine all of the major characteristics outlined to a higher degree than any other type of warship.

6B2. Armament. Battleships carry the heaviest guns afloat. In armament our BB's range from the U.S.S. *Arkansas* with twelve 12-inch guns to the U.S.S. *Iowa* with nine 16-inch guns in threes, twenty 5-inch double purpose guns in

twin mounts. (Many of the new big guns are 16 inch, 50 caliber.)¹ The close-in antiaircraft armament may include more than 100 light guns. (Close-in guns are used primarily to shoot down planes when close aboard.)

6B3. Armor. The importance of armor in BB construction is indicated by the fact that in recent ships a large percentage of the total weight is devoted to armor. The heaviest armor is on the turrets and conning tower, where it is more than 16 inches in thickness. The side armor usually consists of a belt more than 12 inches in thickness and at least one deck height in width extending along the waterline over the long central portion which houses the ship's vitals. Protection against high angle fire and aerial bombs is provided by an armored deck. This deck is more than 4½ inches thick.

Protection is provided against underwater explosions by a system of subdivision. Each Navy has its own system, which is usually a closely guarded secret. This is true of the systems employed in ships of the United States Navy.

6B4. Use. The battleship has a large cruising range. It also has great seakeeping ability which results in a stable gun platform. Our newer BB's are fast ships, capable of doing probably 35 knots. These vessels take a long time to build and the cost runs to many millions of dollars. They carry a large, highly trained crew. Therefore the sinking of one of these ships at sea is a serious military setback.

Battleships are designed to accomplish two major objectives. First, they can engage and sink any and all types of enemy ships by long-range gunfire. Second, they can deliver heavy and continuous bombardment against enemy harbors and shore installations. The terrific hitting power of our battleships has been clearly demonstrated in this war during such engagements as the crippling of the French battleship *Jean Bart* at Casablanca, the Allied landings in Sicily, the battle of Savo Island, and in numerous other engagements.

Despite the great emphasis on protection in a battleship, it is armament and not armor that makes a fighting ship. The basic purpose of a battleship's armor and defensive armament is to keep its main battery guns in action. The BB is a mobile, floating gun platform, and is built around the guns it carries. Its protection is provided for the sole purpose of keeping those guns in action. These vessels are still vulnerable to aerial bombs and torpedoes, and to torpedo attacks by submarines and other torpedo-carrying craft.

During major fleet actions, the BB's form the *battle line* in the fleet disposition, surrounded by carriers, cruisers, and destroyers. As a part of a task force, they add power to hit-and-run raids on enemy positions. When used to aid in escorting convoys the mere presence of a battleship may serve to keep lesser

¹At this point, it is important to note that the caliber of a gun is its inside diameter, and in the United States Navy, the size of a gun is given by stating its *caliber in inches*, and its *length in calibers*. For example, the U. S. Navy has a 16" 45 caliber gun. This means that the diameter of the bore is 16" and its length is 16 x 45 or 720" (60'). Accuracy of gunfire at long ranges is surprisingly good. The German battleship *Bismarck* firing 1900-pound projectiles from 15" rifles sank the British battlecruiser *Hood*, one of the largest warships in the world, with her second or third salvo at a distance of between 12 and 13 miles.



Figure 18. Battleship U.S.S. Alabama.



Figure 19. Giant guns of the battleship U.S.S. Iowa point like deadly fingers at the horizon as the ship lies at anchor during her shakedown cruise.

enemy surface ships at a safe distance. Whether actually in action or merely threatening it, a battleship represents great power.

BB data:

Displacement in tons	27,000-52,000
Length in feet	573-880
Beam in feet	More than 100
Draft in feet	26-36
Horsepower	28,000-200,000
Speed in knots . . . . .	.21 to more than 35
Complement	More than 1500

6B5. Background of battleship. The modern battleship is a descendant of the ship of the line of sailing days. The function of these early heavily armed ships was to fight in the front line of battle. Lord Nelson's victories were attained with this type of ship; our victories in the Revolutionary War and the War of 1812 were won with frigates.

About the middle of the last century began the shift from sail to steam, from oak to iron, from shot to shell, from muzzle-loading smoothbores to breech-loading rifles. These changes were the beginning of the revolution that converted the ship of the line into the modern battleship of today.

6B6. U.S.S. Iowa. A brief description of the *Iowa*, one of the newest and most formidable battleships in our Navy, may be helpful. While many features of this ship are confidential, nevertheless its chief characteristics have become public knowledge.

Her standard displacement is about 44,000 tons. Her length is more than 800 feet (the *North Carolina*, our first modern BB, is considerably shorter), and this great length has several marked advantages. It allows more space for boilers and machinery as well as a better designed underwater hull, which results in attaining a speed of probably well over 25 knots. Her great length also allows for the installation of many antiaircraft guns—a decided necessity in this day of intensified air attack.

Her main battery is composed of nine 16-inch guns disposed in three triple gun turrets, two of which are forward of the control tower and the third one abaft the superstructure. This arrangement permits all nine guns to be fired on both broadsides. As each 16-inch projectile weighs well over a ton, more than ten tons of metal are hurled approximately 20 miles by each broadside. For example, suppose only the moderate rate of one salvo per minute is assumed, the weight of metal which can be delivered in one hour from these broadside guns alone would be 600 tons! With the high velocity of the projectile, the exactness in the fire control instruments, and the expertness of personnel, high accuracy of fire is attained to great distances. Her secondary battery consists of more than sixteen 5-inch double-purpose guns, many antiaircraft guns, and machine guns.

Not only must the *Iowa* be able to steam fast, fight hard, and withstand punishment, but she must be self-sustaining for at least three months. To enable her to remain at sea for this length of time the ship's storerooms are of sufficient

capacity to carry supplies for herself and more than 2000 officers and men. The men of our Navy are the best fed in the world; thus in order to maintain this standard the ship has a refrigerating plant and cold storage space to insure the availability of fresh meat and vegetables during this entire period. A large distilling plant of sufficient capacity supplies all the fresh water needed by the personnel. The boilers which provide steam for running the engines also require fresh water.

To insure efficient and adequate communications between all parts of the ship and to furnish heat, light, and power for the thousands of pumps, motors, air compressors, and many other types of auxiliaries necessary to keep this vast machine going, there are miles and miles of electric cables, telephone wires, voice tubes, steam pipes, water pipes, and air ducts. The ship must be sealed for black-out purposes and to insure protection against poison gases should the enemy resort to their use. All this intricate machinery is kept in efficient operation by the ship's own shops, fitted with all the latest and best equipment for the carpenter, machinist, boilermaker, electrician, armorer, plumber, shipfitter, and optician. There are expert enlisted men in each branch to operate these shops.

To satisfy the usual wants of the men there are two stores which sell at wholesale prices cigarettes, tobacco, candy, toilet articles, and many other commodities which men away from shore may need or desire. There is a large soda fountain where ice cream and soft drinks are available, a barber shop, a tailor shop, a shoe repair shop, and a United States Post Office fully equipped for the sale of stamps and money orders as well as for the registration of letters.

A chaplain, known to the crew as the "padre," looks out for their spiritual wants, helps with advice or counsel on many varied subjects and holds church services every Sunday in a roomy compartment of the ship especially set aside for that purpose. In addition, to insure the physical well-being of the officers and men, there are several doctors and dentists, with a well-equipped dispensary, operating room, dental chairs, and sick bay.

The total cost of the *Iowa* is probably close to \$90,000,000—a far cry from the cost of the first *Constitution*, which was approximately \$300,000.

C. AIRCRAFT CARRIERS (CVB, CV, CVL and CVE)

6C1. Purpose. The modern aircraft carrier is the only really new type of warship produced during this century, and has won for itself a place in the fleet second to none. The construction of these ships since the beginning of the war represents one of the most spectacular phases of the naval shipbuilding program.

Probably nothing has ever changed the methods of naval warfare more than the aircraft carrier. No longer do great fleets line up in battle formation for major engagements on the high seas. The use of aircraft has made it possible for fleets to fight each other while hundreds of miles apart. The carriers are mobile bases for planes, capable of moving aircraft into striking distance of vast areas formerly inaccessible.

The basic difference between aircraft carriers and other large fighting ships



Figure 20. Aerial view of the aircraft carrier U.S.S. Lexington.

of the fleet is that their armament consists principally of planes instead of guns. Strategically, they are warships which strike their offensive blows not through guns or torpedo-tubes, but through aircraft capable of great range in comparison to the former.

The aircraft on carriers or carrier escorts have four main functions. (1) They are used as scouts to locate and observe enemy forces or watch for hostile aircraft. (2) They launch initial long-range attacks against enemy forces. Carrier planes can attack enemy bases thousands of miles from an airport, far out of the range of land-based aircraft. They can attack enemy fleets at sea while the carriers remain at a distance. (3) Carrier planes provide our own ships with air protection against enemy aircraft. (4) Planes may be used on antisubmarine patrols to spot submarines from the air.

The chief function of the carrier itself is to carry, launch, and handle aircraft quickly and effectively. The carrier must approach the enemy unseen at swift speed, launch its planes for the attack, recover them, and get away before its position can be discovered. The carrier uses its fighters and AA guns as an aid in protecting itself from enemy air attack.

The aircraft carrier is the center of a modern naval tactical unit, because of its long-range offensive power and its limited defensive ability. It is a powerful offensive weapon, but it cannot protect itself adequately alone.

6C2. Structural factors. It has become necessary to create a ship with a large unobstructed flight deck; a hangar deck for plane stowage; large and rapid elevators, almost as large as tennis courts, permitting swift movements of planes from one deck to another; extensive space for repair shops, living quarters, and operational equipment; engines which will provide the speed necessary for her planes to take off and land. Thus the main emphasis has been on (1) *speed*, (2) *seaworthiness*, (3) *plane-carrying capacity*, and (4) *protection in the larger types against bombs and torpedoes*.

Below the flight deck, which may have a landing area of more than half an acre on the larger carriers, is the hangar deck. Here are shops which make it a counterpart of the modern hangar ashore. Opening into a large compartment, devoid of obstructions, are the wing, engine, and metal shops. Nearby are store-rooms containing spare parts which make possible rapid repairs to damaged planes.

On the more recent carriers, each squadron has an individual *ready room* which is located near the flight deck. Officers assemble here for last-minute briefing of orders prior to take-off. Normally about fifty desks are provided; also a blackboard and a bulletin board containing all available information pertaining to the operation at hand. Nearby are dials which record automatically the force and direction of the wind and the speed and course of the ship.

The armament of an aircraft carrier consists of 5-inch dual-purpose antiaircraft guns and an extremely large number of rapid-fire, automatic weapons.

The Commanding Officer, executive officer, navigator, and air officer are usually naval aviators.



Figure 21. This mighty new "flat-top" carries a vast array of hard-hitting planes including the Navy's popular fighter, the "Hellcat."

Considerable improvements have recently been made toward protection from underwater damage. The underwater protection of the CVB and CV is comparable to that of battleships, while the armor protection of these carrier types is somewhat greater than that of cruisers. It is also true that aircraft carriers have increased their antiaircraft armament. When operating, aircraft carriers must have accompanying cruisers and destroyers for protection.

6C3. Background of aircraft carriers. The first operation of a landplane on a Navy ship occurred in 1910, when Eugene Ely took off a plane from a temporary deck erected on the forward part of the cruiser *Birmingham*. The same pilot several months later made a successful landing on the battleship *Pennsylvania*. He landed on a wooden platform 130 feet by 50 feet, sloping slightly aft, and was checked by 100-pound sandbags rigged to be caught by hooks in the lower framework of his plane.

Although ships called "aircraft carriers" made their appearance during the first World War, none had flight decks large enough to permit planes to alight as well as to take off. Planes which took off from their decks, usually upon their return landed upon the water, where they floated on air bags until hoisted

to the mother vessel. There were also seaplane carriers which functioned simply as tenders, using derricks to lower and hoist the planes to the water. The first vessel designed with a clear deck which could be used for taking off and alighting was the British ship *Argus*, completed in September 1918, unfortunately too late to be of any use in the war.

Our first aircraft carrier was the *Langley*. It was converted from an old collier and was commissioned in 1922. The nickname, "The Covered Wagon," was given to her because of her close resemblance to the old covered wagon of prairie fame, when viewed in silhouette. The partly completed battle cruisers *Lexington* and *Saratoga* were converted and commissioned in 1927. In 1934 the *Ranger* was commissioned. She was our first ship originally designed as an aircraft carrier. From much data gathered through the adolescent years of carrier operation and the hard knocks of experience, the Navy designed its present-type carriers. The *Yorktown* (1937) and *Enterprise* (1938) incorporated all known improvements in operating facilities and design at the time they were built. The *Wasp* was commissioned in 1940 and the *Hornet* in 1941. Many more carriers of all sizes have since been authorized and carry a high priority. In 1941, we had seven in service and twelve under construction.

Our foothold in the Solomons was made possible by the successful employment of our carriers and their attached aircraft. Our greatest victory in 1942 resulted from the proper use of carrier-based aircraft in the Battle of Midway. Their exploits and the stories of the destruction wrought by their aircraft on enemy ships and planes would fill volumes.

6C4. Types. We have four general classes of carriers, the largest being the CVB's sometimes called the "battle carriers," examples of which are the U.S.S. *Midway* and U.S.S. *Franklin D. Roosevelt*. The CV's include the older U.S.S. *Saratoga*, U.S.S. *Ranger*, U.S.S. *Enterprise*, and the new *Essex* class. The CVL's including the ships of the *Independence* class, are built on a long, narrow cruiser hull. The CVE's are small carriers either converted from tankers and cargo ships or built to a special design following merchant ship practice. At first the CVE's were principally used for convoy work and achieved spectacular success against enemy submarines. Recently they have been a major factor in amphibious assaults. Although their cruising speeds are lower than those of our first-line carriers, these auxiliary carriers can be turned out more rapidly and at a fraction of the cost of conventional carriers.

Carrier data:	CV
Displacement in tons	20,000-33,000
Length in feet	769-888
Beam in feet	more than 80
Draft in feet	20-30
Horsepower	53,000-180,000
Speed in knots	more than 30
Complement	2,000-3,000
Planes	More than 70

Carriers are subjected to two major hazards. They present a larger target than other ships of comparable displacement. Also, since they carry large quan-

ties of aviation gasoline and bombs, they are more vulnerable to attacks by enemy weapons, including torpedoes and bombs, than ships of comparable size.

That an aircraft carrier is a mighty ship in war can be seen from the achievements of the *Enterprise* which was awarded the Presidential Unit Citation for "Gallantry in Action" during the first year of the present war. This citation automatically decorates every man aboard her. It reads:

For consistently outstanding performance and distinguished achievement during repeated action against enemy Japanese forces in the Pacific war area, December 7, 1941, to November 15, 1942. Participating in nearly every major carrier engagement in the first year of the war, the *Enterprise* and her Air Group, exclusive of her far-flung destruction of hostile shore installations throughout the battle area, did sink or damage, on her own a total of 35 Japanese vessels and shoot down a total of 185 Japanese aircraft.

D. CRUISERS (CA, CB, and CL)

6D1. Role of cruisers. Cruisers are the general utility ships of the Navy. They can operate alone, in groups, or with the battle fleet. Since the object of naval warfare is to control maritime communications there must be a numerous class of vessels specially adapted for patrol. These must be fast, of long range, and powerfully enough armed to cope with detached units of the enemy fleet. It happens that vessels which possess the qualifications are also admirably adapted for service with the fleet in the following roles: (1) scouts, (2) protective screens against destroyer attacks, (3) leaders of destroyer flotillas, (4) leaders of destroyer attacks against the enemy, (5) antiaircraft screens, (6) aircraft carrier guards, and (7) support for amphibious operations. The vessels which fulfill these requirements are cruisers.

6D2. Background of cruisers. After Pearl Harbor, we had to build our hopes around aircraft carriers and cruisers. Back in 1812, we were cruiser-minded. Much of our naval tradition and history was written by the first *Constitution*, the *Constellation*, the *Essex*, the *United States*, and others of our original frigates which were the cruisers of the day. Individually our modern cruisers have always been superior ships. The first *Constitution* was not matched by the frigates of any other nation. No more so is the modern *Brooklyn*. This is no contention that the cruiser is the ship of the day nor of the future. Our *Iowa* or our *South Dakota* is superb and essential to our naval power. No single type, no matter in what number, no matter how much it excels in that type, can substitute for balance in the fleet.

The beginning of the war saw the United States with a building program in full swing. Since the war this program has been greatly augmented. Many cruisers have gone down the ways and out to sea, adding their might to the power of the fleet. Many more are in various stages of completion. Some, too many, have been sunk. But we must expect losses. A new *Houston* replaces an earlier one and our strength becomes ever nearer to that necessary for final victory.

6D3. Characteristics. Cruisers today are medium-sized ships with high speed, medium caliber guns, large cruising radius, moderate protection, and excellent

seakeeping ability. Some modern American cruisers have hangars below decks which can accommodate aircraft (used for scouting and spotting). The type is divided, in the U.S. Navy, into *heavy* and *light* cruisers—solely on the basis of armament. Those carrying main battery guns *over six inches* in caliber are classed as *heavy*. Those with guns of caliber *six inches and under* are classed as *light*.

Cruisers cannot be so heavily protected as battleships since the type of operation for which they are designed requires very high speeds. Side armor varies with the individual classes from three inches to six inches in thickness. Cruisers have armored decks which are of sufficient thickness to give protection against moderate-sized bombs as well as gunfire.

The cruiser is particularly important in the present war, because the basic unit with which this war is being fought is the task force. The larger task force is built around carriers as the nucleus and it has battleships, cruisers, and destroyers in the screen. The cruisers are provided primarily because they mount powerful and concentrated antiaircraft batteries. Cruisers have also performed exceptionally well in sudden bombardment raids on enemy shore installations.

6D4. Battle cruisers. There are today, in the strict sense, no battle cruisers in the United States Navy. This type, nevertheless, is worthy of discussion.¹ It was originated by the British Navy early in the nineteenth century and copied by other navies. The qualities emphasized in their construction were (1) *armament* and (2) *speed*. Their displacement was as great as, or greater than, contemporary battleships, and they carried guns equal in caliber to those of battleships. In order to gain an increase in speed, they sacrificed armor to a great extent and carried fewer guns. They were not built primarily to fight in the line.

Battle cruisers were originally designed to act as (1) fast scouts in advance of the battle line or (2) long-range raiders. They were designed to be fast enough to run away from battleships, the only vessels which outgunned them. This advantage did not save the battle cruiser, for with increased engineering skill, modern battleships have both *armor* and *speed* and can overtake and overwhelm any battle cruisers afloat today.

The U.S.S. *Lexington* and U.S.S. *Saratoga* were originally laid down as battle cruisers but were converted to carriers after the Washington Conference. Nine British battle cruisers were built, including H.M.S. *Hood* (then the largest warship in the world). At present it seems unlikely that this class, in the strict sense of the word will be revived.

6D5. Large cruisers (CB). These ships of the *Alaska* class are the nearest approach to battle cruisers in our Navy, although the two types should not be confused. The design of this class was the result of a series of studies com-

¹In the battle of Jutland (1916) the British lost three battle cruisers—the *Invincible*, the *Indefatigable*, and the *Queen Mary*—each of which blew up and went down, with almost all of her men, after receiving a relatively few hits, possibly due to their light armor which may have allowed projectiles to penetrate to their magazines. These ships gave good service as scouts or raiders, but in the battle line it was evident that their lack of armor was a great disadvantage and their speed no compensation if they came within range of the enemy's big guns.

menced after we were no longer bound by any limitations on the size of ships. Information regarding these ships is not available, but they are reported to displace more than 25,000 tons standard displacement, with a speed in excess of 30 knots and batteries of eight or nine 12-inch guns. (The U.S. Navy does not publish figures covering operating displacement. Standard displacement, as defined by the Treaties for the Limitation of Arms, represents a condition when the ship is more or less ready for sea but does not include such items as fuel and fresh water.) The mission of the CB's may not be disclosed at this time.

6D6. Heavy cruisers (CA). Included in the U. S. Navy are the following classes of heavy cruisers: (1) *Pensacola*, (2) *Augusta*, (3) *Portland*, (4) *New Orleans*, (5) *Wichita*, and (6) *Baltimore*. They perform all the essential duties of their class. These ships mount nine or ten 8-inch guns and eight or more 5-inch guns in addition to considerable close-in antiaircraft armament.

CA data:

Displacement in tons	9,000–15,000
Length in feet	585–624+
Beam in feet	61–75
Draft in feet	20–25
Horsepower	More than 100,000
Speed in knots	More than 30
Complement	More than 1,000

One of the most impressive features of the newer ships in the Navy is the tremendous increase in firepower. A comparison between the heavy cruiser, U.S.S. *Baltimore*, commissioned in 1943, and the U.S.S. *Pensacola*, commissioned in 1930, will serve as an illustration. The former is three times as powerful in double purpose guns, almost 40 times as great in smaller AA batteries, and has an over-all firepower which is 123 percent greater than the *Pensacola* as originally built.

6D7. Light cruisers (CL). These ships carry from ten to fifteen 6-inch guns, although the *Atlanta* class (more properly classed as small cruisers) carries sixteen 5-inch double-purpose guns in the main battery. They carry an augmented close-in antiaircraft battery and the *Atlanta* class carries torpedo tubes. Included in this type are some of the fastest cruisers afloat in the world today.

CL data:

Displacement in tons	6,000–10,000
Length in feet	541–614+
Beam in feet	52–61
Draft in feet	14–20
Horsepower	75,000–100,000+
Speed in knots	More than 32
Complement	More than 800

6D8. Light cruiser data. Light cruisers are particularly important in the present war. With their long cruising range, often up to 15,000 miles, cruisers are particularly useful for work in task forces and they are being so employed today. Some of the cruisers on escort duty not only have sufficient fuel for the round-trip across the Atlantic, but also sufficient to refuel their accompanying destroyers while at sea.



Figure 22. Heavy cruiser U.S.S. Minneapolis.

The offensive strength of cruisers is apt to be underestimated by the layman. The 6-inch gun may seem to be a light piece compared to the huge 16-inch armament of a battleship, but it should be remembered that in land warfare, a 6-inch rifle is considered a very large field piece. A 6-inch projectile weighs approximately 100 pounds and can be used quite effectively at ranges up to ten miles. The 8-inch gun hurls a projectile weighing about 250 pounds up to about 14 miles, and has far greater penetrative power than the 6-inch gun. However, the 6-inch gun can be carried in greater quantity on a vessel of a given size, and can be fired much more rapidly. The volume of fire of the modern light cruisers is really tremendous, some being capable of hurling about 150 aimed projectiles per minute (10 per gun), for a short period, from their main batteries.

That the 6-inch gun is a powerful weapon is proved by the Battle of the River Plate, where the 10,000-ton German pocket battleship *Graf Spee*, mounting six 11-inch and eight 5.9-inch guns, was so decisively defeated by a British squadron composed of one heavy and two light cruisers that she retreated into Montevideo and was later scuttled by her own crew. The heavy cruiser *Exeter* was knocked out early in the engagement by the *Graf Spee*, so actually the victory may be credited to the two light cruisers *Ajax* and *Achilles*, each of which mounted only eight 6-inch guns. Speed and maneuverability plus high volume of fire, all characteristics of cruisers, undoubtedly enabled these ships to conclude successfully this action.

Other illustrations of the use of cruisers are:

1. *Raider*—German cruiser *Emden* in World War I sank over 70,000 tons of shipping in a career lasting only two months.
2. *Scouts*—British heavy cruisers *Norfolk* and *Suffolk* sought out and maintained temporary contact with German battleship *Bismarck*.
3. *Torpedo Attack*—British cruiser *Dorsetshire* administered *coup de grace* to the damaged *Bismarck*.

E. DESTROYERS (DD)

6E1. Purpose and description. Destroyers are multi-purpose ships which have been built in great numbers and which are useful in almost any kind of naval operation. They are designed to be swiftly moving platforms on which to place armament. Basically, they are intended to attack larger ships with torpedoes launched from tubes mounted on deck. Their primary qualities are (1) *armament* and (2) *speed*.

The DD's mount from eight to sixteen 21-inch torpedo tubes as their primary armament. They also carry from five to eight 5-inch guns, as well as numerous antiaircraft guns and depth charges which are projected from throwers or dropped from racks. Modern destroyers carry the most up-to-date and complete equipment for detection of enemy units and for fire control.

They are the fastest ships afloat, with exceptionally large power plants and no armor protection except against bomb and projectile splinters and fragments in vital locations. Their only protection against larger vessels is their speed and



Figure 23. Light cruiser U.S.S. Honolulu.

maneuverability and the use of smoke. DD's usually attack at night or through smoke screens in daylight, and are most effective when a number of destroyers make simultaneous attacks from different directions. Although the destroyer is not easy to hit from the air, its unarmored character makes it susceptible to injury even from the lighter types of bombs. Another weakness is its limited endurance, for American destroyers are capable of cruising, at economical speeds, only about 6,000 sea miles without refueling.

The duties and uses of DD's are multitudinous and they have at various times included the following (1) protective screen against enemy submarine, destroyer, or light cruiser attack; (2) striking force against heavy enemy units; (3) laying down smoke screens; (4) as short-range scouts; (5) as antiaircraft screens; (6) as plane-guards for carriers; (7) as escort ships for convoys; and (8) as support for landing operations.

Modern DD data:

Displacement in tons	1,500-2,200
Length in feet	340-400
Beam in feet	30-40
Draft in feet	12-17
Horsepower	50,000-80,000
Speed in knots	35-40
Complement	200-400

6E2. Background of the destroyer. In 1886 Congress authorized the building of our first torpedo boat. It was the *Cushing*, commissioned in 1890. She was 150 feet long and could make 22.5 knots with her 1720-horsepower engines. Her torpedoes could travel about a mile, but were effective only within 500 to 600 yards. Even at that time European navies had torpedo boats 225 feet long which could make a speed of 30 knots or slightly better.

The Spanish-American War gave considerable impetus to the torpedo boat and to the torpedo boat destroyer. The latter became larger and guns were mounted on them. The process continued until now the term "destroyer" does not mean simply a craft to destroy others of its kind but a deadly tool fitted to destroy anything which floats on the surface of the seas, swims under the water, or flies above it. The name "destroyer" comes down to us through many mutations, but no craft is better named, no craft fulfills more closely the promise of its title.

We built 35 torpedo boats, from the *Cushing* in 1886 to the *Wilkes* in 1898. In the year of the Spanish-American War, Congress authorized the building of 16 torpedo boat destroyers, the first in our Navy. These ships displaced about 325 tons and could make a speed of 30 knots.

Torpedo boats and destroyers played an unimportant part in the war with Spain. The Spanish destroyers *Pluton* and *Furor* with Cervera's squadron at Santiago constituted a threat to the American Fleet but never more than that. These two vessels were potentially dangerous, but the Spaniards were unable to utilize their power.

The Russo-Japanese War was commenced by the Japanese in typical fashion.



Figure 24. Destroyer U.S.S. Kidd.

They attacked Russian ships with the newest, deadliest weapon of the day—a torpedo attack on the ships of a nation with whom they were still at peace. Torpedo boats and destroyers, particularly those of the Japanese, were active on both sides during the war. That torpedo-carrying vessels are essential to a well-rounded fleet was definitely established by the two wars.

For nine years after the Spanish-American War we rested on our destroyer program of the year 1898. From 1907 steady progress was made until 1916 at the rate of about six destroyers a year. The war gave an impetus to our entire shipbuilding program, destroyers included, and in 1916 and 1917, prior to our entry into the war, 35 destroyers were authorized. On 1 July 1917, the year we declared war against Germany, we had 52 destroyers fit for service. The first World War was the testing ground of the destroyer. In actual tasks performed, allied destroyers probably contributed as much as or more to the successful conclusion of that war than did any other type of ship. They made the convoy system possible and practicable. In 1917, after our entry into the war, this country engaged in the then vast program of building 238 destroyers.

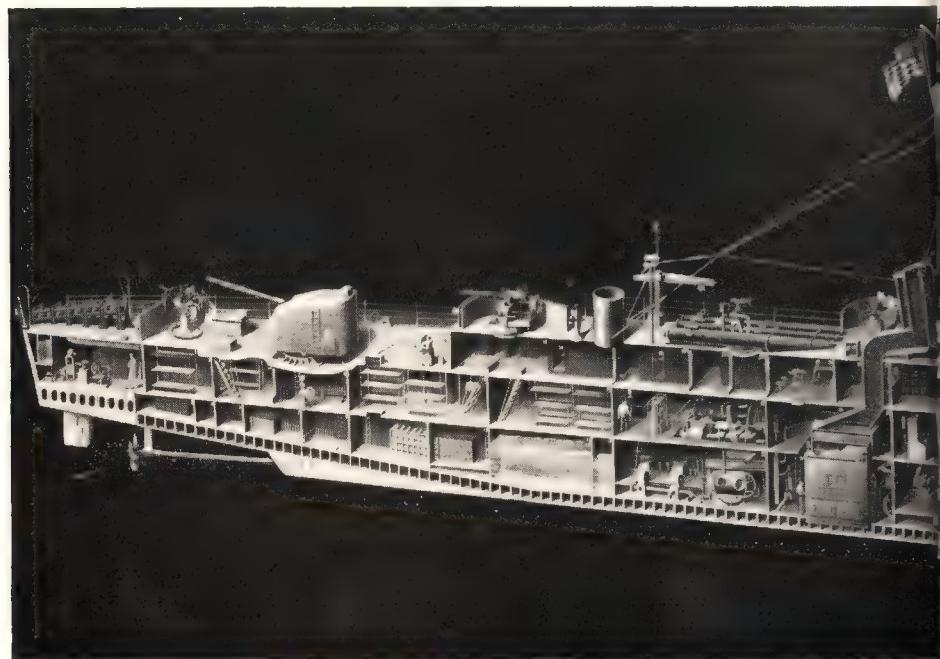
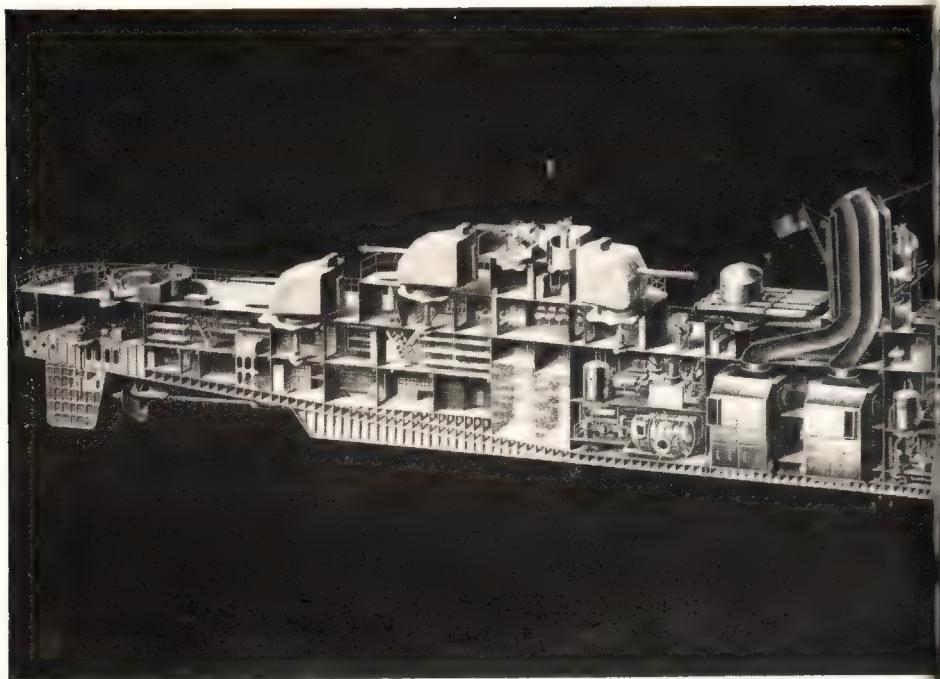
After the war, as more and more of our destroyers came into service, it became less and less possible to keep them in commission. Peace, economy, and disarmament became the watchwords. Two hundred-odd of these splendid ships were laid up, about half in the Philadelphia Navy Yard, and the remainder at the Destroyer Base at San Diego, California.

Our new destroyers are streamlined, incorporating the latest and best features in speed, mobility, offense, and defense. Seventy-two of the *Bristol* type were authorized in 1940. Since the war we have authorized and are building these ships in almost incredible numbers. Before the end of 1943, the United States probably built and had in operation more destroyers than were on the lists of the combined navies of the world only a few years ago.

It is interesting to note that the outbreak of war in September of 1939 found Great Britain with only 185 destroyers in her Navy, whereas she had 500 available in the last stages of the first World War. This weakness almost proved her undoing in 1940 and 1941, when her shipping losses were so terrific as to affect materially the course of the war.

F. DESTROYER ESCORTS (DE)

6F1. General. Destroyer escorts, one of the newest ships in the Navy, built especially for use in antisubmarine warfare, have already made a name for themselves. They are somewhat smaller and have less speed than destroyers. They are capable of being turned out rapidly and at lower cost. They are larger, faster, and more maneuverable than any ship previously designed specifically for use against submarines. The DE's are equipped with the most modern scientific developments in detection and ranging devices, and are armed with depth charges, 3-inch or 5-inch guns, close-in AA weapons, and in some cases, triple torpedo tubes. Their mission is primarily to escort convoys and to sink submarines. They also have been used as plane guards for CVE's.



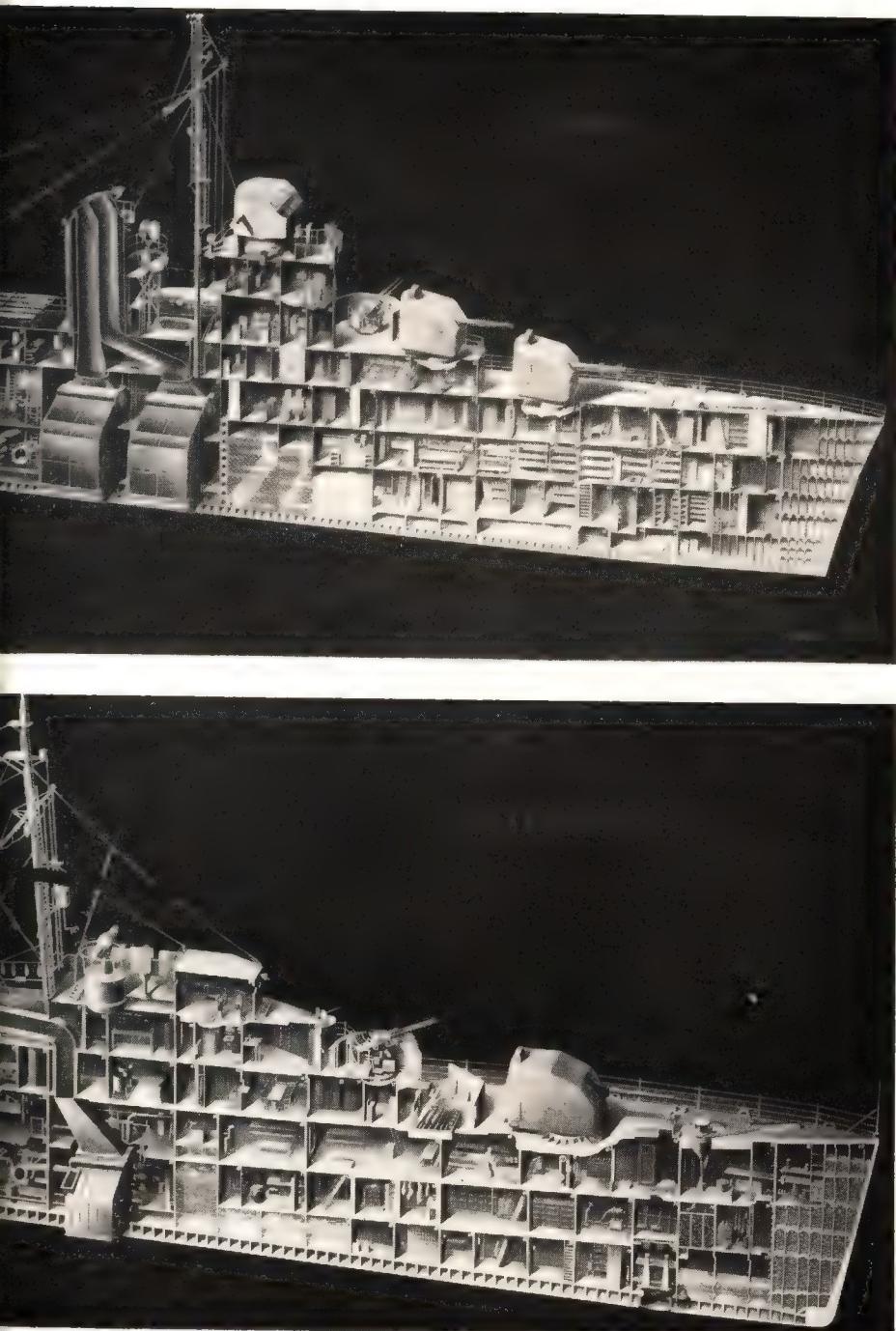


Figure 25. Cross-section of destroyer (top) and destroyer escort (bottom).

DE data:

Displacement in tons	1,600
Length in feet	306
Beam in feet	34
Draft in feet	10
Speed in knots	Greater than 18
Complement	More than 150

6F2. Background of the destroyer escort. When we commenced furnishing escort vessels for convoys prior to 7 December 1941, the only type we had available for such duty was the destroyer, actually a faster and more heavily armed vessel than was needed.

The demand for destroyers to act as escorts became stronger and stronger as our Lend-Lease convoys grew larger and more frequent. It was not at all unusual to find a paltry number of destroyers acting as escorts for a huge convoy consisting of dozens and dozens of fine, large ships.

In order to meet the growing menace to convoy operations due to our lack of available ships, particularly after 7 December and the Axis' great effort to cut our lifeline extending across the Atlantic, it was necessary to design and build ships to fill the gap between the submarine chaser and destroyer—our version of the British corvette. The destroyer escort vessel was designed, after due consideration of production and shipbuilding facilities, to serve this purpose.

The destroyer escort vessel program provides for the construction of hundreds of these special ships, designed for convoy service and intended to relieve larger and more heavily armed ships from this duty.

7

TYPES AND CHARACTERISTICS OF NAVAL VESSELS—PART II

This is the second chapter on types and characteristics of naval ships. Battleships, aircraft carriers, cruisers, destroyers, and destroyer escorts were discussed in the previous chapter with emphasis on the features which every ship designer must keep in mind; i. e., (1) armament, (2) protection, (3) speed, (4) seaworthiness, (5) stability, (6) maneuverability, and (7) cruising range. At this point, the specialized combat vessels of the Navy will be considered.

A. SPECIALIZED COMBAT VESSELS

7A1. Submarine (SS). The submarine has an importance in naval warfare out of proportion to its size. It is a vessel of a specialized type which has become, since the turn of the century, one of the most important naval weapons in warfare. Obviously its principal distinguishing feature is the ability to submerge beneath the surface of the water and disappear from sight. Its prime characteristics are: (1) submersibility, (2) armament (torpedoes), and (3) cruising range.

Since it has a large fuel capacity, the cruising range of this ship when operating on the surface is correspondingly great, frequently being from 12,000 to 14,000 miles. When operating on the surface, the submarine is propelled by Diesel engines, and when submerged, by electric motors energized by storage batteries.

The two principal types of dives which can be made by submarines are the quick ("crash") dive and the running dive. The first, the quick dive, is made when the submarine is running on the surface on its engines and, spying danger, must get out of sight without delay. The time required for submergence may be less than a minute. The second, the running dive, is more leisurely and is employed where danger of enemy action is nonexistent.

The main purpose of the submarine is to sink enemy surface craft by means of torpedoes. (These craft are sometimes considered as mobile mine fields.) The submarine has been found highly valuable as a *raider* against enemy commerce or enemy warships. It is mainly for its results in this type of operation that the submarine has become best known in the two World Wars. It has also been used as a *long-range scout*, operating far in advance of the battle line, or lying submerged off enemy harbors to detect activity. For example, when submarines are strategically distributed throughout an area where it is believed enemy ships will pass, they are an excellent means of obtaining information



Figure 26. Submarine U.S.S. Grayling.

regarding course, disposition, and size of those ships. They are also used extensively as *minelayers*, operating either on the surface or submerged.

Many other uses have been found for the submarine in the present war. During the last days on Bataan and Corregidor in 1942, submarines were employed to bring in ammunition and medical supplies and to carry out gold and other valuables. Some service and civilian personnel were also evacuated by them. Submarines have carried reconnaissance parties ashore in enemy territory and have landed commando parties for small island raids. The submarine's deck guns are sometimes used against small craft or merchant ships. Occasionally submarines have attacked other submarines.

The physical requirements for submarine duty are high and special precautions are taken to keep the personnel in the best physical condition. Such precautions include air conditioning, sun lamps, special attention to heat fatigue, as well as a special diet.

SS data:

Displacement in tons	530-2700
Length in feet	186-381
Beam in feet	18-33
Draft in feet	12-16
Surface speed in knots	14-20
Submerged speed (max.)	8-11
Complement	33-100

The submarine has several inherent disadvantages or weaknesses:

- (1) Lack of speed, which often prevents either attack or escape. (*Note:* Top surface speed is usually under 21 knots. Submerged speed is rarely over 11 knots, although the Japanese two-man submarines can exceed 12 knots.)
- (2) Small cruising radius when submerged. (*Note:* As submarines operate on electric batteries when submerged, their radius is limited by the capacity of storage batteries, and when the batteries run down, the submarines must surface to recharge them by using their Diesel (surface) engines. At top speed of about 10 knots, a submarine's batteries will be depleted in one hour; at half speed, in four hours; and at cruising speed of 3 to 4 knots, in 24 hours.)
- (3) Must emerge to replenish air at least every 48 hours. (*Note:* A submarine can remain submerged up to 72 hours if it merely lies on the bottom. But, if it is operating, the upper safety limit is something under 48 hours.)
- (4) Vulnerability to gunfire. (*Note:* The only armor on a submarine is a very light plating on the conning tower. A single well-placed hit either on the conning tower or the hull will usually prevent diving, thus destroying the ship's greatest defensive asset.)
- (5) Vulnerability to underwater attack. (*Note:* A depth charge, or "ashcan" contains several hundred pounds of TNT, and is set off by the action of a hydrostatic valve which can be adjusted to detonate at any depth

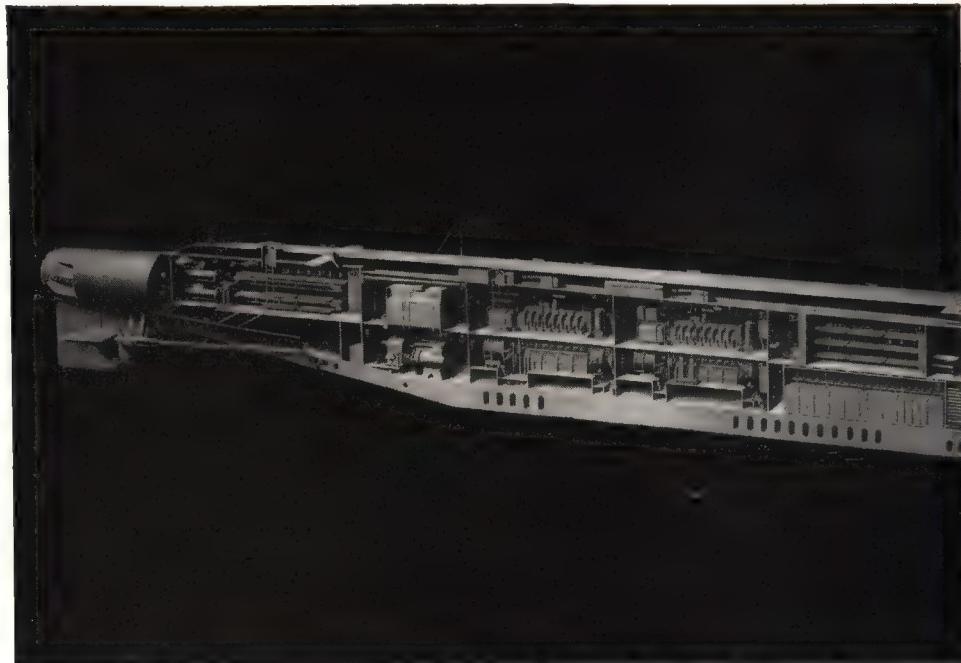


Figure 27.

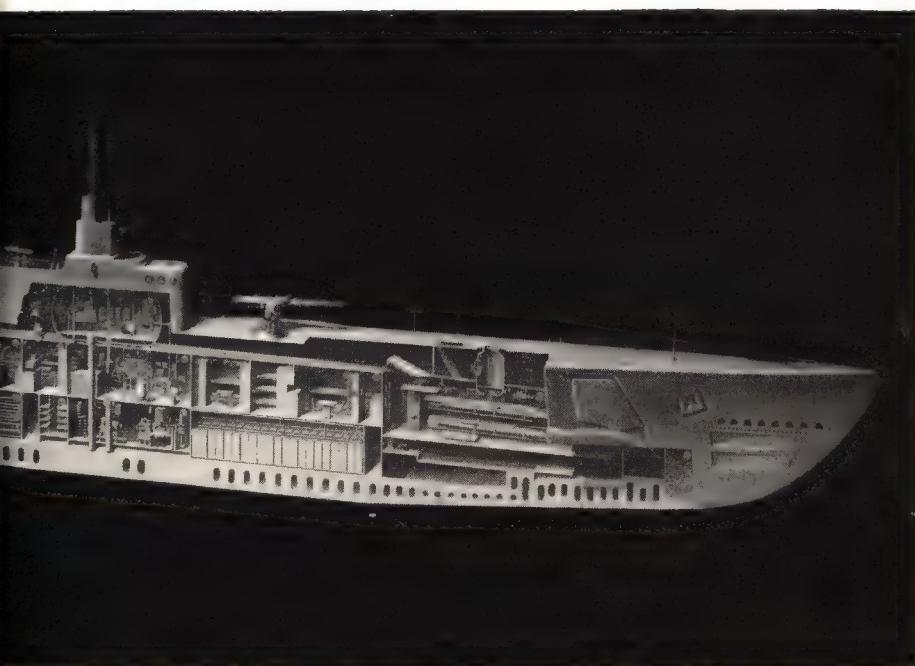
up to about 500 feet by the pressure of the water. The explosion of the depth charge imparts a hammer-like blow which is actually delivered to objects in the vicinity by the pressure waves through the water.)

- (6) Restricted vision. (*Note:* The periscope of a submarine has a limited field of vision. Since it leaves a "feather" wake as it moves through the water, the submarine must be wary of using it in the presence of the enemy—the very time when she needs it most. Even when on the surface, the submarine rests so low in the water that its range of visibility is much less than that of a surface craft.)

The fact that the submarine must operate submerged, when on the defensive, is the outstanding operational weakness of this type of vessel.

7A2. Background of the submarine. At the time of the Revolutionary War, David Bushnell, often called the "Father of the Submarine," built his one-man submarine, the *Turtle*, which towed its torpedo alongside. The idea was to get under the stern of the enemy ship, fasten the torpedo screw into the wooden hull, and then get clear before the time-fuse set off the explosive. Sergeant Ezra Lee, skipper of the *Turtle*, never quite succeeded in blowing up a British ship but managed to give a few of them some bad scares, which caused an exodus from the harbor.

Twenty years later Robert Fulton, inventor of the steamboat, built a submarine in France and ably demonstrated its possibilities by blowing up hulks;



Cross-section of submarine.

but neither Napoleon nor the British were impressed sufficiently at the time to want submarines in their Navy.

During the latter part of the War Between the States, small submersibles about 35 feet long were constructed, and one of them, the *Hunley*, actually succeeded in attaching a torpedo to the hull of the new frigate *Housatonic*, destroying it on 17 February 1864. However, the *Hunley* with its crew, was also lost.

The submarine did not become a practical combatant vessel until the electric storage battery and the internal-combustion engine appeared on the scene almost simultaneously toward the end of the nineteenth century. About this time two American inventors, John P. Holland and Simon Lake, commenced building submarines which were finally to take shape in 1914 as submersibles capable of firing torpedoes which could reach a target under their own power. Most of the nations were not greatly interested, however, until the day when the ugly little German U-boat, the U-9, under the command of Otto Weddigen, on 22 September 1914 made the whole world submarine-conscious by sinking in rapid succession the English cruisers *Hogue*, *Aboukir*, and *Cressy*.

The submarine commanded by Weddigen was typical of those of its day. Small of size, approximately 450 tons, it carried a crew of about 22 officers and men. The boat was unwieldy during a submerged run, the living conditions aboard were almost unbearable, and only short cruises could be taken.

There is very little about the large, long-range, seagoing, submarine of today

that is reminiscent of the small "pig boat" of World War I, except its name. Air conditioning and electric refrigerators (large enough to supply the crew with food for weeks at a time) have been installed, reliable and speedy engines built, tanks enlarged sufficiently to hold a supply of fuel oil adequate to carry the boats many miles from their bases, and enough torpedoes and torpedo tubes added to enable them to carry on a prolonged campaign without replenishment. The ship designers have improved the seagoing qualities to permit cruises at sea even in the roughest weather.

Submarines in this war. Early in this war, Admiral Hart spoke enthusiastically about the damage inflicted upon the Japanese shipping by the submarines under his command in the Pacific. He said it was equal to that accomplished by all his other units combined. Later, while working from Java and Australia and the main base at Pearl Harbor, these vessels (mostly 1,500-ton craft capable of the 4,000-mile cruise to enemy home waters) constantly attacked enemy naval and merchant ships. They lurked off Japan's harbors, preyed upon coastal trade and particularly upon vital communications and supply lines.

From the attack on Pearl Harbor to 1 January 1945, wholly apart from those which they have probably sunk or damaged, our submarines have definitely sent to the bottom no fewer than 99 Japanese warships, including a large aircraft carrier, 14 cruisers and 44 destroyers; also 835 noncombatant vessels aggregating more than 3,500,000 tons or about half of Japan's estimated pre-war merchant fleet. Since Japan's shipping requirements have increased tremendously during the war, this loss may well be considered a serious blow to enemy shipping.

Modern submarines range from the two-man baby submarine of about 45 tons used on several occasions by the Japanese to the great French *Surcouf* which carried 8-inch rifles, an airplane and had a surface displacement of almost 3,000 tons.

7A3. Motor torpedo boats (PT). The PT is essentially a fighting craft whose characteristics are (1) speed and (2) armament. It is lightly constructed, propelled by high-power gasoline engines, and designed to attack large vessels with torpedoes and to patrol coastal areas. The PT's cruising range at high speed is about 700 miles. This enables it to make a dash at a target, shoot its torpedoes, and be away before action can be taken against it. (It is desirable to attack at night under slow speed so that it cannot be seen or heard.) After firing its load of torpedoes, the PT attempts to escape by employing speed and evasive tactics. It also uses smoke for purposes of deception. Outstanding records of this type, familiar to us all, occurred in the Pacific and in the Mediterranean.

PT data:

Displacement in tons	50
Length in feet	70-80
Beam in feet	20
Draft in feet	4
Horsepower	3600
Speed (loaded) in knots	32-50
Complement	11



Figure 28. Geared for speed and action, the U. S. Navy's PT boat 117 slips through a calm sea on a trial run.



Figure 29. Sturdy, fleet, and well-armed, this 173-foot PC approaches a destroyer escort in maneuvers off Miami, Florida.

7A4. Anti-submarine vessels. The development of the submarine has called into existence numerous types of small vessels whose primary function is to sink submarines. Both land-based and carrier-based aircraft are playing a role of ever-increasing importance in anti-submarine warfare; however, it is our purpose at this point to discuss the surface craft which have been developed for this task.

The standard anti-submarine attack by surface craft is made either with stern-dropped depth charges or ahead-fired projectiles. This type of attack is carried

out against submerged submarines by means of sound gear which enables the attacker to determine the position and movements of the enemy with a fair degree of accuracy. Therefore, the prime requisite for the surface craft is maneuverability equal or superior to the submarine. It is also necessary that these ships be sufficiently seaworthy to carry on in all conditions of weather while engaged in convoy operations of long duration. Therefore, the two most important qualities in any vessel designed to combat submarines are (1) *maneuverability* and (2) *seaworthiness*. The *destroyer escort* which is playing a prominent role in this work has already been discussed.

Corvettes and gun boats (PG). This type has carried a large part of the convoy escort burden since the war began. Corvettes are named after light warships of the days of sail and are mostly Canadian-built. Many of the gunboats are converted yachts. In many respects, they are ideal for this duty. Their turning circle is no greater than that of a submarine, they are adequately equipped and armed, and are seaworthy. A typical PG displaces from 1,000 to 2,000 tons, is 230 to 330 feet long, 35 to 40 feet in beam. It has a top speed of about 18 knots and a crew of 100 to 200 men. Within this classification, there is wide variation in construction and design and it is not practical to present statistics covering the class as a whole.

Patrol craft (PC). The classification *Patrol Craft* includes the 110-foot sub-chaser and the 136-, 173-, and 184-foot steel vessels. This type is also doing magnificent work in escorting convoys, although the small size of these ships, and especially their narrow beam, handicap their operations in heavy weather. They are equipped with detection and ranging devices as well as with the armament necessary to cope with enemy submarines.

Submarine chasers (SC). The SC actually is now one of the many types of PC's and is generally referred to as a patrol vessel. The SC is a wooden ship, and is the smallest one used effectively in this type of warfare. The best known class is 110 feet long, 15 feet in beam, about 5 feet in draft, and displaces about 100 tons. Top speed is about 15 knots and the complement is approximately 30 men. The SC is equipped with the usual anti-submarine gear and armament, and has performed excellent service in its field.

7A5. Landing craft. The amphibious craft is a development of modern warfare. In the present war the establishment of beachheads during an invasion plays an important role in tactical maneuvers. The progress of our armed forces in the Pacific, in Africa and Italy is paralleled by the successful operations of our amphibious forces. The function of these boats is to guarantee the landing of a sufficient flow of men, materials and supplies to establish the beachhead and carry the fight inland. After the landing of the first wave of boats, carrying troops, there are successive waves landing tanks, tractors, jeeps, trucks, supplies and all the other necessary implements of war. These boats and their officers are the spearhead of an invasion. There is no military or naval operation which necessitates more careful planning than amphibious warfare. Not only the usual intelligence information, maps and hydrographic charts are necessary but it is



Figure 30. Giant LST doors yawn open and troops pour out to reinforce their comrades on Bougainville in the Solomons.

essential to send scouts in advance to determine the exact nature of natural and man-made obstacles. Specially trained units in vessels built for this sort of service are employed.

The strategic positions of the enemy in Europe, in the Pacific land areas, and formerly in North Africa have necessitated that this war in the initial stages of the offensive phase be largely an amphibious operation. We have seen in North Africa, Sicily, and Italy, amphibious operations on a large scale and it is probable that we will see other landings of greater proportions and of increasing complexity.

The landing of enormous forces of men, equipment, and supplies on hostile beaches long distances from the area where these forces were assembled is required in this sort of warfare. Obviously, amphibious operations require complete cooperation between Army and Navy so that at every point they work as a perfectly coordinated unit rather than as members of two separate commands.

The peculiar character of this type of warfare has required the development of many different kinds of landing craft, and there are today more than 40 different varieties.

In the following paragraphs are discussed some of the types of landing craft.

Landing ship, tank (LST). The principal function of an LST, as the name implies, is that of establishing a beachhead and landing tanks, often in the face of strong enemy opposition. This ship is perhaps the most spectacular development in landing ships. As has happened in so many other instances of ships designed for a special purpose, the LST has been used for many tasks other than that for which it was built. It has been used successfully for transporting all types of vehicles, for carrying high explosives, and for moving large quantities of aviation and motor gasoline. It has also been employed as a hospital ship for evacuating casualties from beaches while fighting was in progress.

For example, during the allied invasion of Normandy, all LST's were equipped for casualty evacuation. Although it was estimated that the average LST would carry 150 men per trip, facilities were provided for 200. Each was manned by two Navy medical officers, one Army traumatic surgeon, two Army enlisted surgical technicians, and 20 Navy hospital corpsmen. Early estimates were that evacuation from the beaches would not be possible until H plus 12, but casualty evacuation actually began at H plus 2. Six hours later, casualty evacuation points were thoroughly established, and the flow of wounded men to England was begun.

Cargoes containing large quantities of aviation gasoline and high explosive ammunition have resulted in the LST being subjected to operating hazards of an unusually dangerous nature. Nevertheless, this type of ship has demonstrated a real ability to withstand the effects of severe damage while engaged in any one of a great variety of amphibious operations.

Tanks, other vehicles, or general cargo are carried in a hold 260 feet long, on either side and outboard of which are compartments where troop passengers are

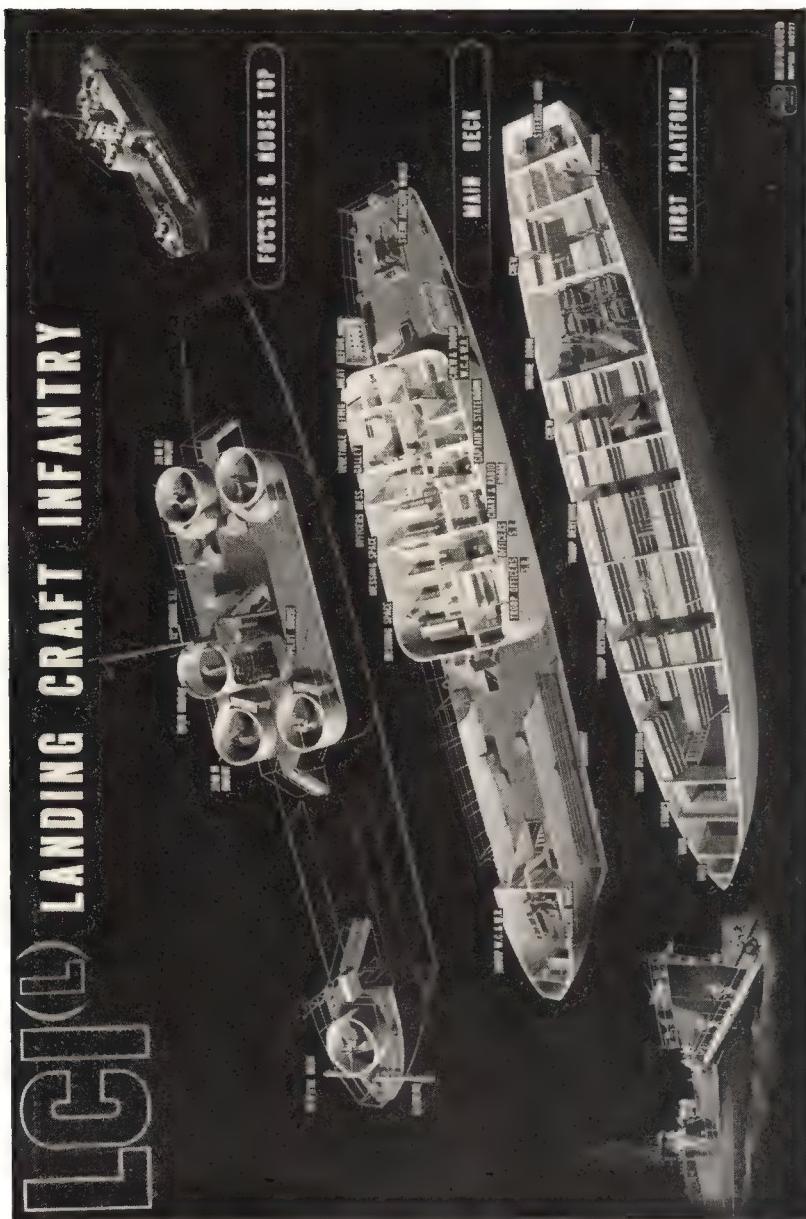


Figure 31.

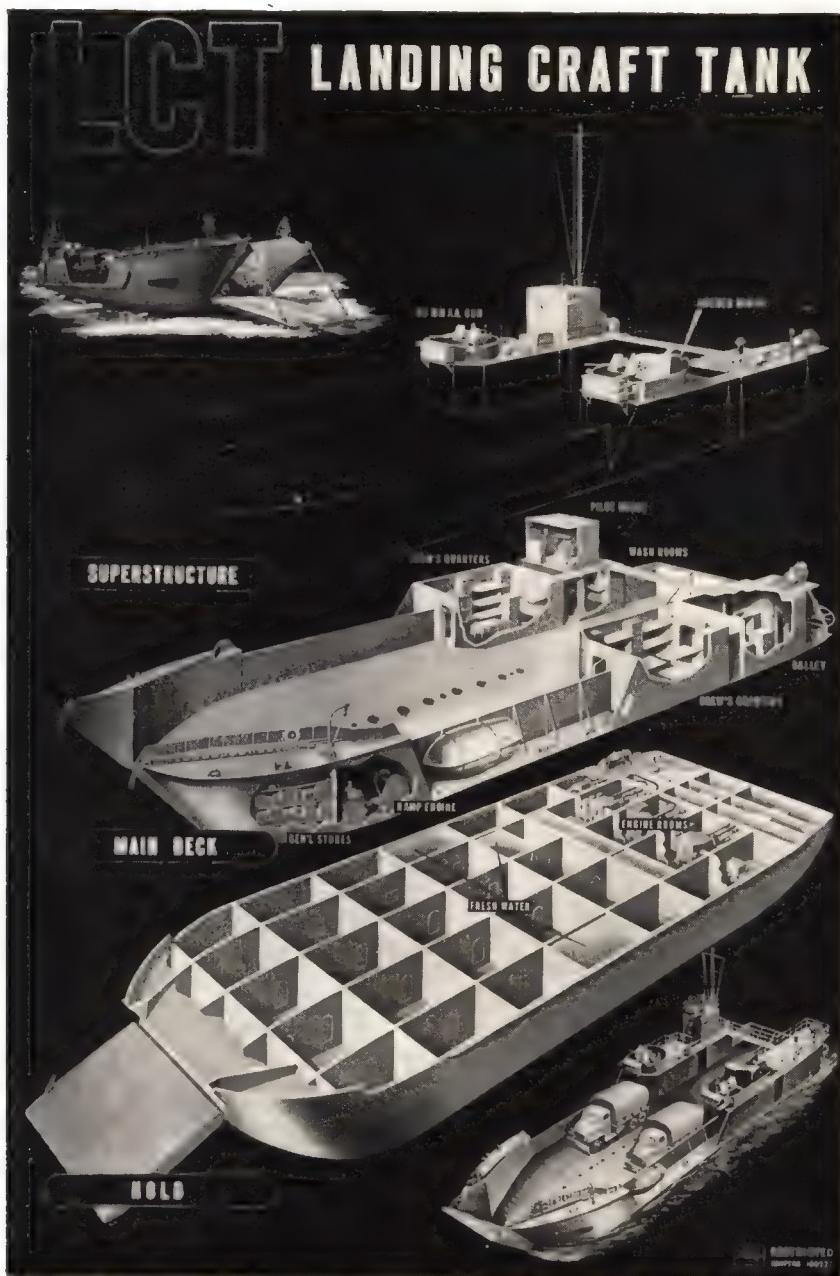


Figure 32.

quartered. It is customary to carry cargo on the main deck as well as in the hold. The armament is primarily defensive in nature.

In approaching land, an LST drops a stern anchor when 200 yards or more from the beach to keep it from broaching while on the beach and also to enable her to retract from the beach.

LST data:

Displacement in tons . . . . .	. . . . .	{2200 (landing) {3300 (ocean condition)
Length in feet . . . . .	. . . . .	316
Beam in feet . . . . .	. . . . .	50 approx.
Draft in feet (at sea) . . . . .	. . . . .	12' 4" (mean draft)
Speed in knots . . . . .	. . . . .	? ?
Troop capacity . . . . .	. . . . .	175 approx.
Complement . . . . .	. . . . .	71 approx.

The *LCI(L)* (*Landing Craft, Infantry, Large*), the largest landing ship designed primarily to carry troops, is an ocean-going vessel. It has an over-all length of approximately 157 feet. This ship can carry about 200 troops fully equipped for an assault landing. Generally troops are not loaded more than 48 hours away from their destination because of limitations of galley and living accommodations.

Some models have extended ramps on either side of the bow for debarkation but the newer models have a centerline ramp. After either beaching or loading, the LCI(L) can retract from the beach under its own power, being equipped with a stern anchor. Packaged cargo which does not require equipment for handling can be transported in these ships. The armament consists only of several close-in antiaircraft weapons.

LCI data:

Displacement in tons . . . . .	. . . . .	250 approx.
Length in feet . . . . .	. . . . .	153
Beam in feet . . . . .	. . . . .	23
Draft in feet (at sea) . . . . .	. . . . .	5 1/2
Draft in feet (landing) . . . . .	. . . . .	2 1/2 fwd.-4 1/2 aft.
Troop capacity . . . . .	. . . . .	192
Complement . . . . .	. . . . .	23

LCT's (*Landing Craft, Tank*) are designed to land Army tanks under their own power. Several different sizes have been developed. The 150-foot type will transport six tanks, make a speed of six to nine knots, and carry a complement of 28 men and one or two officers.

They are open-decked and are barge-like in appearance. Not ocean-going vessels, they are generally transported on LST's or in sections on APA's or AKA's, or cargo vessels. They are sometimes used on runs from nearby bases or for ship-to-shore transportation. They may carry other motorized vehicles and artillery as well as tanks.

The officer-in-charge is usually an ensign.

The *LSD* (*Landing Ship, Dock*), more than 450 feet in length, is the largest landing ship. It is a ship built around a floating drydock and carries loaded landing craft into the beachhead area. Then the hold is flooded and the craft



Figure 33. The LSD (Landing Ship, Dock), one of the largest ships in the Navy's fast-growing amphibious fleet, is an ocean-going vessel.

sail out. It has a massive forecastle which, combined with a low stern, gives it a topheavy, unbalanced look. Insignificant stacks rise amidships from each bulwark. The open hold aft may be decked over temporarily to carry more cargo. It is well-armed for antiaircraft defense and may be used for a repair ship after the beachhead is established.

LSM's (Landing Ships, Medium) are designed to land a combat load on the beach and to supply the beach after the original landing. They must retract from the beach after unloading their equipment or be able to reembark troops and equipment if necessary. The over-all length is slightly more than 200 feet, and the cruising radius well over 3000 miles. The ship's complement is four officers and 48 men and the Commanding Officer is a lieutenant. The executive officer, in addition to general administration and personnel duties, usually directs the navigation, construction, and damage control departments. The gunnery officer is an ensign who also handles communications, commissary, and stores. The engineering officer who is also assistant damage control officer, is an ensign.

The *LCC (Landing Craft, Control)* is equipped with special communication equipment. In an amphibious operation it guides the assault waves into the beach. Under the command of the boat officer are a navigating officer and a crew of about 10 men.

The *LVT (Landing Vehicle, Tracked)* is used both as a cargo and as a personnel carrier. The blades on the tracks make this vehicle very effective in landing operations involving reefs and swamps. The two main types are the LVT(A)(1), an armored amphibious cargo and personnel carrier mounting two machine guns, and LVT(A)(2), an armored amphibious tank, with low lines and a turret superstructure, and mounting a 37-mm cannon. A gunboat on the water, it becomes a tank when it hits the beach, and keeps right on going. At Tarawa these craft swept over reefs, onto shore, and on the island when other landing craft had difficulty.

The *Dukw's* ("ducks") are amphibious trucks. They travel on land after bringing men, ammunition, supplies to shore.

The *LCS(S) (Landing Craft, Support, Small)* is designed to furnish fire support, both surface and antiaircraft, in the area of the landing. It is sometimes used also as a command craft for troop commanders. It is about 36 feet in length, and has rocket and gun installations. Smoke generators are also provided. The personnel consists of an ensign and a crew of six men. These boats ordinarily do not come closer to shore than 800 yards.

Some other types of landing craft are: LCVP (Landing Craft, Vehicle, Personnel); LCR (Landing Craft, Rubber); LCM (Landing Craft, Mechanized); LSV (Landing Ship, Vehicle).

7A6. Minecraft. The term minecraft includes a great variety of ships from specially designed 6000-ton vessels to small converted fishing trawlers. Basically, they consist of two types, (1) *minelayers* and (2) *minesweepers*. The former are used offensively to sow mine fields in waters used by enemy vessels, or defensively to mine our own harbors to prevent enemy raids. Minelayers usually plant



Figure 34. Crammed with men and material for the invasion of Cape Gloucester, New Britain, this Coast Guard manned LST nears the Japanese-held shore.

the mines in fields which may be used to block channels, protect harbors, harass trade routes, and embarrass the enemy during fleet actions. Mines may be laid from the decks of minelayers and some minesweepers, from torpedo or bomb racks of planes, and from torpedo tubes or special release chambers of submarines.

Minesweepers are in constant use in wartime to clear areas in which mines are known or suspected to have been planted. Though not publicized to any extent, these craft fulfill an important mission. Along our own coastline they keep regular channels open and safe for our shipping, and, in more distant theaters of operation, clear the way for landing craft or sweep captured enemy harbors before transports and supply ships make use of them. Minecraft which operate with the fleet or in hazardous advanced areas must be seaworthy, and capable of self-defense. Some of our minecraft are especially designed for this type of operation. Others are converted destroyers with torpedo tubes removed and mine-laying racks or sweeping gear installed. For defensive operations along our coastlines, small wooden ships or converted tugs and fishing vessels are satisfactory.

There are several classes of minecraft in the U.S. Navy. Some of the more common are:

- (1) CM—large ships designed for fleet mine-laying.
- (2) CMc—coastal minelayers, usually converted from small merchant ships.
- (3) DM—light, fast, fleet minelayers converted from World War I destroyers.
- (4) DMS—light, fast minesweepers converted from old destroyers.
- (5) AM—especially designed fleet minesweepers.
- (6) AMc—small, wooden-hulled coastal minesweepers.
- (7) YMS—small minesweepers assigned to navy yards or naval districts.

B. AUXILIARIES

7B1. The train. No fleet could exist as a fighting force without the *train*. The train is composed of the invaluable auxiliary vessels which perform the multitude of tasks necessary to keep the fleet at sea. Great skill and ingenuity are required to carry out the function of keeping warships in repair; supplying them with ammunition, food, and fuel; salvaging damaged vessels; transporting troops; removing wounded from battle areas; and carrying out hundreds of similar tasks. These ships are classified according to their function and the many types may be found in the section on Designating Symbols (7C1).

7B2. U.S.S. Relief. One of the most interesting ships of the train is the hospital ship. A brief description of the U.S.S. *Relief* may be helpful. It has been in continuous service since it was commissioned in 1920. It is 483 feet long, 9800 tons, with a speed of 14 knots. The *Relief* can take care of more than 500 bed patients. Forward and below the bridge is a curved structure housing the operating room, which is 45 feet wide, 16 feet high, and was as modern as any in the world when built. The galley is equipped to provide any kind of diet necessary for the patients.



Figure 35. Fleet auxiliaries form an important part of the U. S. Navy. Pictured above is the hospital ship, U. S. S. *Refuge*.



Figure 36. Scene in a hospital ward on board a typical hospital ship, the U.S.S. Solace.

The operating personnel on the *Relief* includes more than 15 doctors and surgeons, over a hundred hospital corpsmen, and at least a dozen nurses. Hospital ships are the only type of ship in the Navy carrying women for duty. These experts are prepared to treat any ailment from those of the ear, nose, and throat, to physiotherapy, psychiatry, and urology. Included on the staff are excellent dentists.

Many of the comforts of an expensive convalescent ward ashore are made available to the wounded or sick; easy, comfortable chairs, books and magazines to read, the best movies every night, and the finest food available anywhere.

A fleet hospital ship functions like a Navy ship with a tremendous sick bay. Maintenance and handling of the ship are the responsibility of the line officers and crew. The chaplains care for the moral and spiritual welfare of the personnel and arranges for their entertainment. The senior medical officer is in charge of the medical department.

An idea of the work accomplished by hospital ships in taking care of wounded can be gained from the log of one which showed that in a single year during this war she had traveled almost 50,000 miles and her doctors had taken care of more than 6,000 patients. She served for several months as a station hospital at an island in the Pacific and evacuated patients directly from the beaches at a major engagement.

By international law and agreement at Geneva, the hospital ship is clearly marked as such and is immune from attack by belligerents. Its white hull, with the long, horizontal green stripe along its side and a red cross on the stack and on the side, is unmistakable. By night it is brilliantly lighted, the only type of ship carrying lights in wartime.

In spite of this agreement an Australian hospital ship was torpedoed and sunk early in this war—a dreadful instance of gross violation of a law that had been accepted by the nation who perpetrated this dastardly act. However, such an act will not deter our hospital ships from their work, and after each fleet engagement our seagoing Florence Nightingales will be there to nurse the wounded back to health so that they may again join in the fight to defeat a merciless enemy.

C. SHIP DESIGNATIONS AND NAMES

7C1. Designating Symbols. The following is a table of the symbols used to designate all U.S. naval vessels by type. It includes both combat vessels and auxiliaries.

Symbol	Type of Ship	Symbol	Type of Ship
AD	Destroyer Tender	CA	Heavy Cruiser
AE	Ammunition Ship	CB	Large Cruiser
AF	Provision Store Ship	CL	Light Cruiser
AG	Auxiliary Miscellaneous	CM	Minelayer
AGC	Combined operations, head Communication Ship	CMC	Minelayer, Coastal
AGP	MTB Tender	CVB	Aircraft Carrier, Large
AGS	Survey Ship	CV	Aircraft Carrier
		CVL	Aircraft Carrier, Small

<i>Symbol</i>	<i>Type of Ship</i>	<i>Symbol</i>	<i>Type of Ship</i>
AH	Hospital Ship	CVE	Aircraft Carrier, Escort
AK	Cargo Ship	DD	Destroyer
AKA	Cargo Ship, Attack	DE	Escort Vessel
AKS	General Stores Issue Ship	DMS	Minesweeper, High Speed
AM	Minesweeper	IX	Unclassified Vessel
AMB	Harbor Minesweeper	LCA	Landing Craft, Assault
AMC	Coastal Minesweeper	LCC	Landing Craft, Control
AN	Net-laying Ship	LCI(L)	Landing Craft, Infantry, Large
AO	Oilier	LCM	Landing Craft, Mechanized
AOG	Gasoline Tanker	LCP	Landing Craft, Personnel
AP	Transport	LCS	Landing Craft, Support
APA	Attack Transport	LCT	Landing Craft, Tank MV
APC	Coastal Transport	LCV	Landing Craft, Vehicle
APD	Destroyer Transport	LSD	Landing Ship, Dock
APH	Transport for evacuation of wounded	LST	Landing Ship, Tank
APM	Mechanized Artillery Transport	PC	Patrol Craft
APR	Transport Rescue Vessel	PCE	Patrol Craft, Escort
APV	Aircraft Transport	PCS	Patrol Craft, Small
AR	Repair Ship	PE	Patrol Vessel, Eagle
ARB	Repair Ship—Battle Damage	PF	Frigate
ARD	Floating Drydock	PG	Gunboat
ARG	Repair Ship—Internal Combustion Engine	PT	Motor Torpedo Boat
ARH	Repair Ship—Heavy Hull	PY	Yacht
ARI	Repair Ship for landing craft	PYc	Yacht Coastal
ARS	Salvage Vessel	SC	Subchaser
AS	Submarine Tender	SS	Submarine
ASR	Submarine Rescue Vessel	YAG	District Auxiliary
ATF	Ocean Tug, Fleet	YFB	Ferry Boat
ATR	Rescue Tug	YHB	House Boat
AV	Seaplane Tender	YMS	District Minesweeper
AVD	Seaplane Tender, Destroyer	YN	Net Tender
AVP	Seaplane Tender, Small	YNT	Net Tender Tug
BB	Battleship	YO	Fuel Oil Barge
		YP	Patrol Vessel
		YT	Harbor Tug

7C2. How ships are named. Since it is often possible to identify the classification of a ship by its name, it is well to be familiar with the system which the Navy Department follows in naming vessels. There are exceptions to these rules, however. It should be noted that no vessel is named in honor of a living person. In the following section, examples for each classification will be found in parentheses.

(1) *Battleships* (BB)—named for states by act of Congress. (*New York, Iowa*)

(2) *Cruisers* (CA, CL)—named for cities and towns in the United States and capitals of United States' possessions and territories. (*Atlanta, Brooklyn, San Francisco*)

(3) *Cruisers* (CB)—named for territories and insular possessions of the United States. (*Alaska, Guam, Hawaii*)

(4) *Aircraft Carriers* (CVB, CV, CVL)—named for famous ships formerly on the Navy list and important battles of the present or past wars. (*Ranger, Bonhomme Richard, Lexington, Saratoga, Coral Sea, now Franklin D. Roosevelt*)

(5) *Aircraft Carriers* (CVE)—named for bays, islands, and sounds of the United States and for battles of the present war. (*Tulagi, St. Joseph Bay, Guadalcanal, Block Island*)

- (6) *Destroyer* (DD)—named for deceased persons in the following categories: American Navy, Marine Corps, and Coast Guard personnel who rendered distinguished service to their country, Secretaries and Assistant Secretaries of the Navy, members of Congress who were closely identified with naval affairs, and inventors. (*Sims, Porter, Edison, Madison, Heywood L. Edwards*)
- (7) *Submarines* (SS)—named for fish and denizens of the deep. (*Perch, Sturgeon, Barracuda, Whale*)
- (8) *Hospital Ships* (AH)—logical and euphonious words. (*Mercy, Relief, Samaritan*)
- (9) *Cargo Ships* (AK)—named for astronomical bodies (*Sirius, Capella*) and counties of the United States. (*Arlington*)
- (10) *Repair Ships* (AR)—named for characters in mythology. (*Vulcan, Prometheus*)
- (11) *Ammunition Ships* (AE)—words which are suggestive of fire and explosives; and names of volcanoes. (*Piro, Nitro, Lassen*)
- (12) *Naval Transports* (AP, APA, APR)—named in honor of deceased Commandants of the Marine Corps and Marine Corps officers; counties in the United States; places of historical interest; signers of the Declaration of Independence; famous women of history; and famous men of foreign birth who rendered aid to our country in her early struggle for independence. (*Le Jeune, Arthur Middleton, Florence Nightingale*)
- (13) *Submarine Tenders* (AS)—named in honor of pioneers in submarine development and also for sea deities in mythology. (*Fulton, Holland, Sperry*)
- (14) *Mine Sweepers* (AM)—named for birds; logical and euphonious words. (*Raven, Cardinal, Pursuit, Adroit*)
- (15) *Submarine Rescue Vessels* (ASR)—named for birds. (*Falcon*)
- (16) *Gunboats* (PG)—named for small cities; logical and euphonious words. (*Tulsa, Charleston, Fury, Action*)
- (17) *Oilers* (AO)—named for Indian names of rivers. (*Platte, Rapidan, Brazos*)
- (18) *Seaplane Tenders* (AV)—named for sounds. (*Puget Sound*)
- (19) *Seaplane Tenders* (AVP)—named for bays, straits, inlets. (*Barnegat, Greenwich Bay, Biscayne, Bering Strait, Cook Inlet*)
- (20) *Net Tenders* (YN)—named for trees, and (Tug Class) Indian chiefs and other noted Indians. (*Hackberry, Holly, Ebony, Yaupon, Tesota*)
- (21) *Destroyer Tenders* (AD)—named for localities and areas of the United States. (*Prairie, Dixie, Everglades*)
- (22) *Oceangoing Tugs* (ATF)—named for Indian tribes. (*Cherokee, Navajo, Apache, Choctaw*)
- (23) *Harbor Tugs* (large) (YTB)—named for Indian chiefs, and words of Indian dialect. (*Tecumseh, Pawtucket*)
- (24) *Frigates* (PF)—named for cities and towns in the United States, and towns of United States' possessions and territories. (*Newport, Alexandria, Annapolis*)
- (25) *Destroyer Escorts* (DE)—named in honor of personnel of Navy, Marine

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Corps, and Coast Guard killed in enemy action in present World War. (*Lloyd E. Acree, Douglas A. Munro, Parle, Traw*)

(26) Yachts—Yachts, coastal (PY-PYc)—named for old ships formerly in the Navy; gems; also logical and euphonious words. (*Siren, Emerald, Valiant, Sturdy*)

(Certain material in this chapter has been adapted from Taussig and Cope's *Our Navy, A Fighting Team*, with permission of the publishers, McGraw-Hill Book Co., Inc.)

8

TYPES AND CHARACTERISTICS OF NAVAL VESSELS—PART III (Emphasizing Ship Identification)

A. INTRODUCTION

8A1. Importance of recognition. Combatants in the present war have, on occasion, bombed and shot at their own ships and those of their allies.

The objective of all seagoing personnel should be to recognize important ships or types at a glance. For this purpose, a study of the types and characteristics of naval vessels will undoubtedly prove of value. Determination of a ship's type constitutes a primary step in identification in combat areas. Since accurate estimation of a ship's size is extremely difficult at sea, an observer may have occasion to resort to certain rules of thumb to differentiate various types of fighting ships.

8A2. Problem of identification. Of all fighting ships, the old *Monitor* must have been about the easiest to identify. She had a single turret and a single stack on a wide flat hull, which readily identified her. Modern warships have become considerably more complex. In fact there are very few warships in the world today that look precisely alike. An expert, however, can tell even sister ships apart by minor differences in their masts or superstructures. All ships share in some degree the essential characteristics of their type, and as one becomes familiar with ships, one also becomes increasingly aware of the peculiar national character that distinguishes ships of each of the world's navies.

"Spot" identification of ships at sea is not always possible. The appearance of individual warships is constantly undergoing alteration in war, and consideration must be given to elements of structure that are least subject to change, such as main armament and hull proportions.

The student of ship identification should first of all familiarize himself with the types of ships that make up a modern fleet or a modern task force. Each type of ship has been designed to play an aggressive role in combat. Each has its place and function in the disposition of the Fleet when at sea. Not all types of ships, however, are intended solely for operation with others. A cruiser or lighter vessel may execute an independent combat mission, preying upon commerce or clearing the sea of raiders and other enemy naval units. Generally speaking, the number of ships of each type in a well-balanced navy will vary inversely with size. Thus, for every battleship, approximately two heavy cruisers, two light cruisers, and five destroyers will be built. The relative proportion

of our existing carriers or of carriers building or contemplated cannot be expressed in similar terms and is therefore omitted.

For every ship that is built to meet an opponent in battle, a dozen are built to perform prosaic but necessary jobs for the maintenance, supply, and protection of the Fleet and its shore establishments. Many types of repair, supply, and transport vessels are constantly engaged in serving and maintaining our two-ocean fleet. Extended naval operations often would be impossible without these ships. In waters where adequate docking, repair, and fuel facilities do not exist, the crippling of an enemy repair ship or oiler may force them to modify or even abandon an important operation.

Identification of such units is important. An observer must be able to distinguish enemy ships of these types from corresponding vessels belonging to his own navy and to his allies. Accurate reporting of minor enemy ship types present in an operating area is an important factor in anticipating an opponent's plans and in the formation of strategic as well as tactical decisions.

B. TYPES AND PURPOSES OF NAVAL VESSELS

8B1. Fighting ships. A ship, to be classed as a *fighting ship*, must be capable of inflicting damage and of sustaining or avoiding damage. She must possess sufficient speed and maneuverability to execute her mission, and the capacity to proceed independently to a scene of action. The type of a warship is determined by the degree to which each of these qualities has been stressed in her design.

We have covered the attributes of a fighting ship in a previous chapter, but let us review them. A ship's armament comes first. The capacity to cause damage is a primary attribute of fighting ships. Ships may be designed to strike devastating blows by projectiles from their guns, torpedoes from their tubes, bombs from aircraft they may carry, or by depth charges or mines. Battleships and cruisers are essentially gun ships, although they carry other weapons. Carriers, minelayers and torpedo boats are designed for special attack functions, with guns provided largely for defense, while destroyers and submarines are dual armament ships, using either guns or torpedoes. Larger types carry secondary batteries, primarily intended for defense against destroyers or submarines, or, if "dual purpose," for protection from attack from the air.

Next let's review the attribute of protection. A fighting ship must also be able to absorb punishment. A ship may be designed to stand up under enemy fire, to mitigate its effect, or to avoid it. She may be provided with armor: heavy steel plate around vital parts to defeat projectiles, bombs, and torpedoes. Her hull will be subdivided into separate spaces, or provided with bulges or blisters, to confine the effects of flooding and explosion. This is called compartmentation. Damage control systems consisting of provisions for counterflooding, fire fighting, etc., are developed in varying degrees in all types. Speed and maneuverability in themselves constitute factors of protection in smaller types in which armament and protection have been sacrificed for these qualities, while submarines depend for protection largely on their ability to submerge.



U.S. FIGHTING SHIPS

COMPARATIVE LENGTHS SHOWN ARE APPROXIMATE

Figure 37.

An additional attribute is, of course, mobility. Most fighting ships are propelled by high-pressure steam boilers and geared turbine engines, although Diesel or reciprocating engines are sometimes used in the smaller types.

Since a large proportion of total displacement and space is allotted to armament and protection in the design of battleships, these ships do not attain the

high speeds of some smaller combat units. Carriers are designed for speed, with corresponding sacrifice of armor. Cruisers' speeds will range from 30 knots, which will permit a heavy cruiser to operate with the Fleet and outrun most battleships, to speeds of over 40 knots in lighter types. Speed is essential to a destroyer's functions and new types are capable of attaining or bettering that of any cruiser.

Sea-keeping is of vital importance. Without the capacity to reach a scene of operations, execute a mission, and return to a base, even the fastest fighting ship would be of little value.

Battleships must carry crews and provisions necessary to take them into battle with enough ammunition, fuel, and food aboard to permit them to fight and return. Cruisers are often required to perform independent missions at great distances. Sea-keeping capacity thus is a prime consideration in their design. Carriers must also be designed to accommodate provision for extended operations and fuel for their aircraft. Destroyers, as they often operate with task forces or in convoy, must also carry provisions for such work, subject to limitations of size; while submarines are required to remain in enemy waters for extended periods. It will, therefore, be seen that sea-keeping is a highly important factor in the design of all more important types of fighting ships.

8B2. Battleships. Battleships combine gun power and protection in the highest degree. The speed of modern battleships now approaches that of most of the fast surface types, and with a few exceptions, they have great endurance. They may be called mobile fortresses.

8B3. Carriers. The aircraft carrier is essentially a mobile air base. Her aircraft constitutes her offensive armament and the guns she carries are largely for purposes of defense. Torpedo bombers, fighters, and scouting planes are carried for attack and reconnaissance as well as for defense. A carrier's basic design renders her vulnerable to all forms of attack. High speed and great endurance are essential to operation as a long-range surprise attack weapon. Her major purpose is to provide air strength at sea where shore-based aircraft are unavailable.

8B4. Cruisers. Since cruisers are built to perform a number of duties, they show many variations in size, speed, and armament, and hence in appearance. Cruiser displacements range from 2,900 tons upward. A heavy cruiser's guns (usually 8") will outrange any except those of a battleship. These ships may, therefore, serve as line-of-battle ships in the absence of battleships, in support of carriers in task forces, as independent commerce raiders, as convoy protectors, or as part of the screen that is thrown out around a fleet in motion. Light cruisers range from vessels of the size of heavy cruisers, carrying lighter armament (usually 6" guns), to extremely fast smaller ships, whose purpose is primarily that of escort and antiaircraft ships.

8B5. Destroyers. The destroyer's name originates from the function for which these ships were originally designed. When the torpedo became an important factor in naval warfare, steam torpedo boats capable of high speeds were devel-



Figure 38. Typical features of a battleship are outlined against the sky in this view of the mighty U.S.S. Missouri.

oped. A larger but similar type carrying heavier gun armament was designed to destroy these ships, and the torpedo boat destroyer thus came into existence. The destroyer has now assumed many of the torpedo boat's functions as a "hit and run" ship. Torpedoes remain her primary weapon in most instances, and sudden attack on enemy ships with rapid withdrawal remains, with screening duties, among the destroyer's chief attributes in fleet combat. Equipped with depth charges, destroyers have also become an answer to enemy submarine attack and are widely used in convoy protection. In recent years British and Japanese destroyers of unusual size have been built. These ships are often equipped with guns at the expense of their torpedo armament; thus the full cycle has been reached and the "destroyer-destroyer" has appeared. Large destroyers of this sort perform so many of the tasks of light cruisers that a clear line of demarcation between the types is difficult to draw. Generally speaking, the difference lies in the cruiser's heavier armor and construction and more elaborate provision for compartmentation and damage control.

8B6. Submarines. Identification of submarines constitutes a difficult problem. Their low freeboard and simple superstructure give ships of this type a similarity of appearance that has resulted in many errors. At sea it is hard to gauge their dimensions, and only careful study of the distinguishing characteristics will enable the observer to identify them. Operating independently, these craft raid convoys singly or in packs, pick off lone vessels, or execute long-range strategic reconnaissance missions. Attached to a fleet or task force they may act as scouts in support of their own surface ships. While the torpedo is the submarine's principal weapon, some specialized types are highly effective mine layers.

The submarine's capacity to render herself invisible through submergence and her high average endurance enable these ships to operate in waters inaccessible to surface types. The smaller the submarine, the greater is its tactical efficiency.

8B7. Minor combatant types. Minor combatant types comprise fighting ships of lesser individual importance which supplement or support the types already discussed. These ships seldom operate tactically in fleet or fast task force missions. They perform important combat work with the weapons they carry and should be distinguished from auxiliaries which are primarily service or transport units.

Minor combatant types are principally mine sweepers, submarine chasers, motor torpedo boats, mine layers, gunboats, and torpedo boats. A detailed description of these types is not necessary for our purposes.

C. SALIENT CHARACTERISTICS OF FIGHTING SHIPS

8C1. Hull proportions. One of the most easily recognized characteristics of a ship is her hull proportions. These may be broken down into (1) ship shapes, and (2) deck lines and superstructure types.

1. *Ship shapes.* A ship's function is reflected in the design of her hull. The long-range, heavily protected battleship has the beam necessary to make her a

stable gun platform, to contain within her hull the crew, equipment, and supplies necessary for long voyages and for maintenance of her complex organism, and to give her the longitudinal compartmentation necessary for protection from gunfire and torpedo attack. Battleships are, therefore, the broadest beamed of

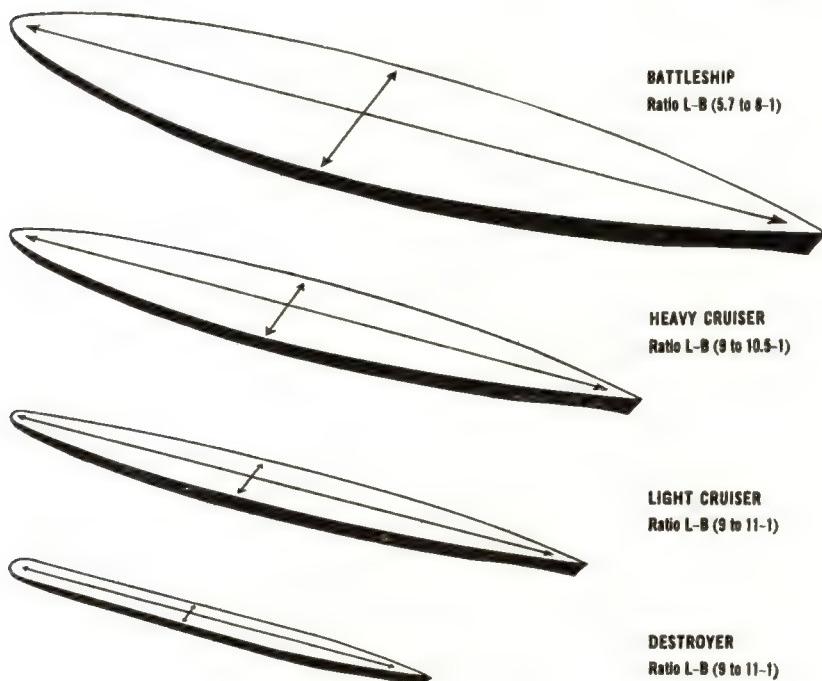


Figure 39. *Ship shapes.*

the fighting ships, while destroyers and torpedo boats appear, when seen from above or from fore and aft, the most slender, since they are reduced to the barest essentials for the sake of maximum speed and maneuverability. Heavy cruisers, since they must combine speed with cruising range and limited protection, have hulls with a ratio of length to beam (L/B) about halfway between those of battleships and destroyers, while light cruisers decrease in beam as they grow smaller until their hull proportions are indistinguishable from those of destroyers. Note, however, that the typical cruiser's hull is more tapering and less flat-sided than the destroyer's, while presence of a continuous hull curve from stem to stern is a characteristic of battleships. There are some important variations to the hull types illustrated, notably in U.S. cruisers with square "transom" sterns and in a few Japanese cruisers whose hull shapes closely resemble those of destroyers.

These are, of course, generalizations, and will be found to vary considerably, but L/B ratio remains the most useful means of determining type.

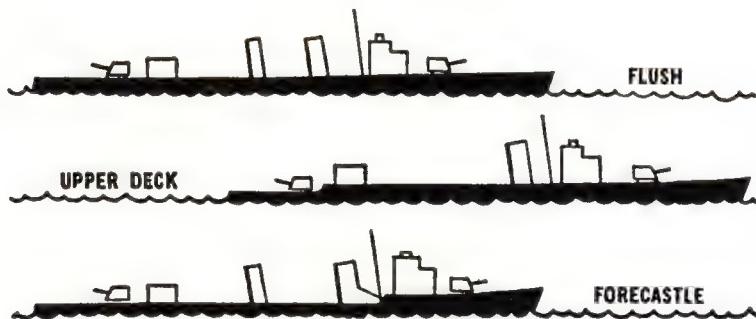


Figure 40. Deck lines.

2. *Deck lines and superstructure types.* Breaks in deck lines (see Fig. 40) will often differentiate one ship from another. These are not usually difficult to observe in more modern ships, but may not be clearly distinguishable in older battleships which carry their secondary batteries along their sides rather than on deck.

A ship's superstructure may fall into one of three classifications. When a structure occurs forward of the ship's center, she is known as a *single island* type. If two unconnected deck structures appear, the ship is a *twin island* type, while if the ship has a continuous structure amidships, she is of the *center island* type. Further classifications result from a combination of deck lines and superstructures. It should be remembered that it is often difficult to classify positively superstructure types which appear in many larger ships, because of the presence of boats and other gear which clutter the 'midship sections of these ships and often obscure their superstructures. Narrow "wells" or spaces between superstructure elements are also difficult to observe from any position other than full broadside. It is therefore well to avoid reporting a ship as having any special type of superstructure unless one has had an opportunity for thorough observation from a broadside position.

8C2. Armament. Gun mounts, like turrets, are wholly enclosed. Turrets generally occur along the centerlines of larger ships. They are of greater size and their proportions are lower than those of gun mounts.

A great variety of main armament dispositions occurs among the world's fighting ships. These are usually clearly discernible from the air and their observation constitutes one of the most useful determinants in identification. Since secondary armament is often difficult to see, it is advisable to base identification only on main armament appearing along the centerline of the ship observed.

1. *Ship's guns and their mounts.* With the exception of the casemate gun (generally a secondary gun on old ships) the types illustrated in figure 42 may form the main armament of all combatant ships, from the open mount of lighter craft and submarines to the heavy twin, triple or quadruple turret of battleships.

Main armament of battleships ranges from 16-inch down to 11-inch guns. Heavy cruisers usually carry 8-inch guns, light cruisers 6-inch to 4.5-inch guns. Destroyer armament varies from 5.5-inch to 3-inch guns.

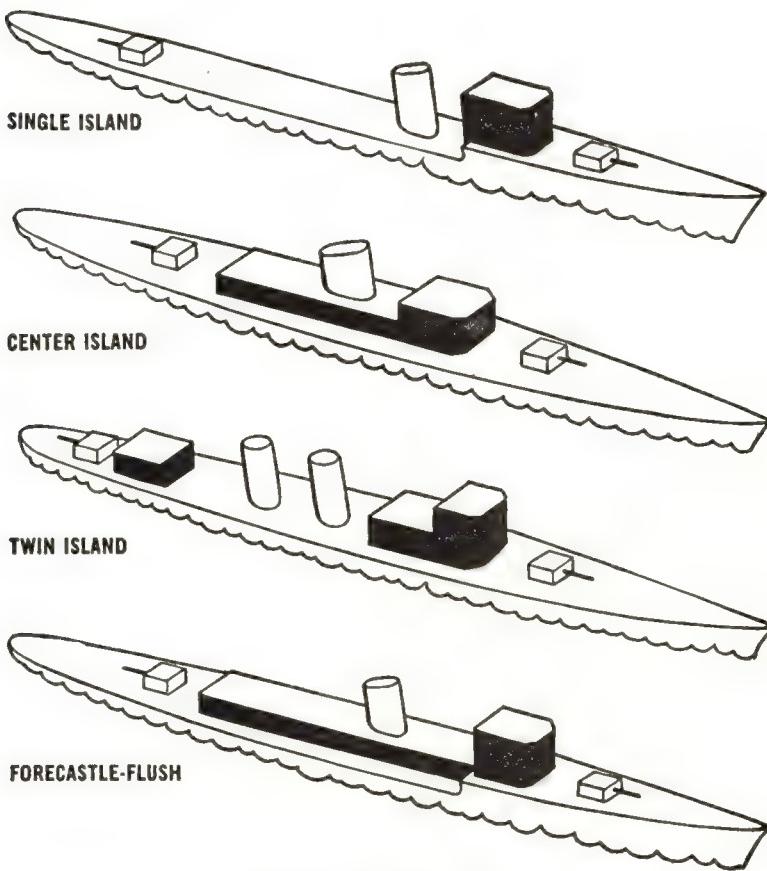


Figure 41. Superstructure types.

Various classes of Japanese battleships may be differentiated by their main armament alone. While this is an extreme case, it will be found that disposition of main armament is an extremely useful clue to identification.

8C3. Masts. Masts cannot always be assigned to one or another of the several types. Some are "border-line" cases, falling between two types, others are unique structures which belong in none of the standard classifications. Generally speaking, however, masts may be classified under one of the types which appear in figure 43. It should be remembered that, of all elements of a ship's structure, masts are most subject to alteration and addition. An example of this may be seen in older Japanese battleships, which began with tripod or other multiple masts which have by now become so cluttered with galleries and flying bridges

NAVAL ORIENTATION

that the basic supporting structure has become invisible. These masts now fall into the category of pagodas or towers, but in their transitional phases it was

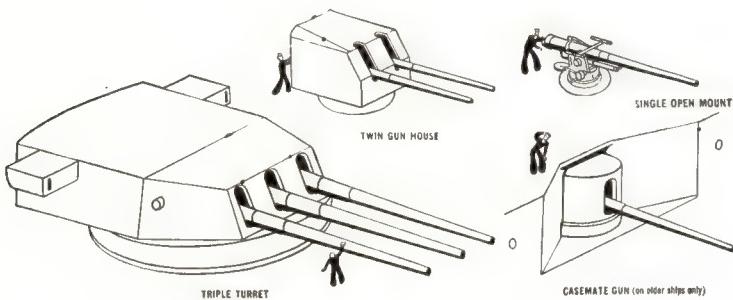


Figure 42. Guns and gun mounts.

impossible to assign them to any definite classification. Masts must, therefore, be observed carefully, but in many instances should not be used as the basis for positive identification of a given ship.

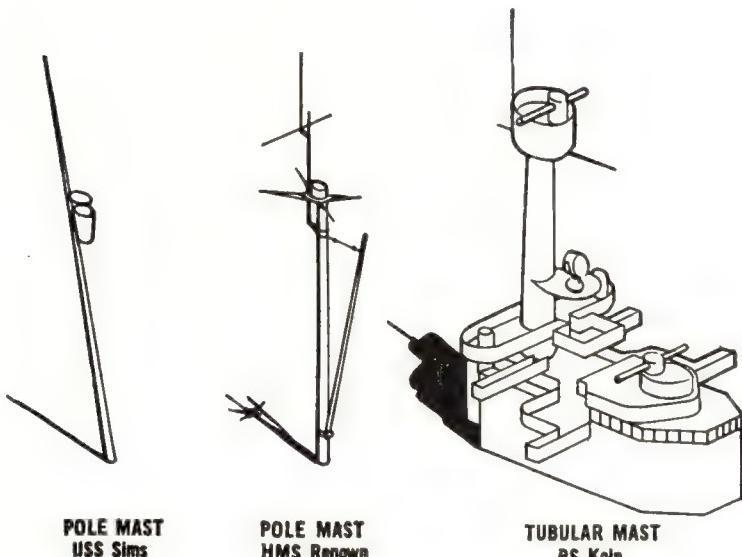


Figure 43. Pole masts.

The most common types of masts are:

1. *Pole mast*. The pole or stick mast is the simplest and earliest of mast types. It has evolved in some cases into the tubular mast.

2. *Tower mast.* The tubular mast has increased in girth to house many of the control elements of the ship, and has become the tower mast or director tower that is common in larger modern naval vessels. (The developments of the tower mast are also shown in the illustrations below.)

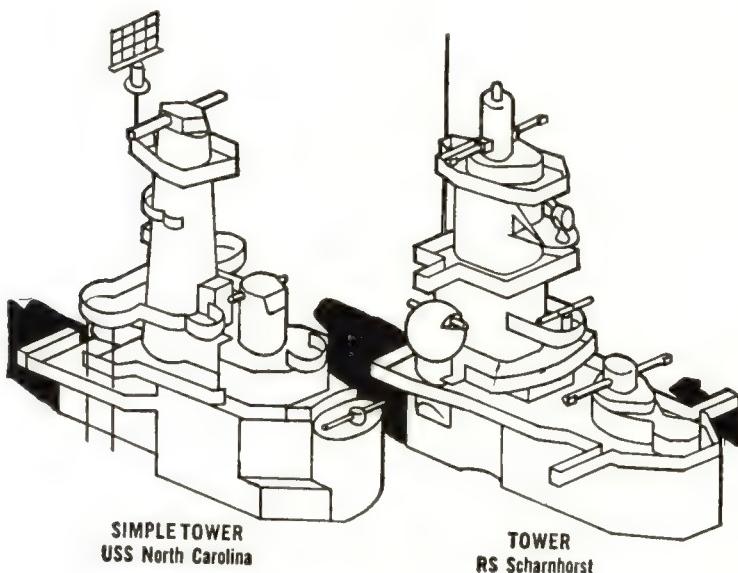


Figure 44. Tower masts.

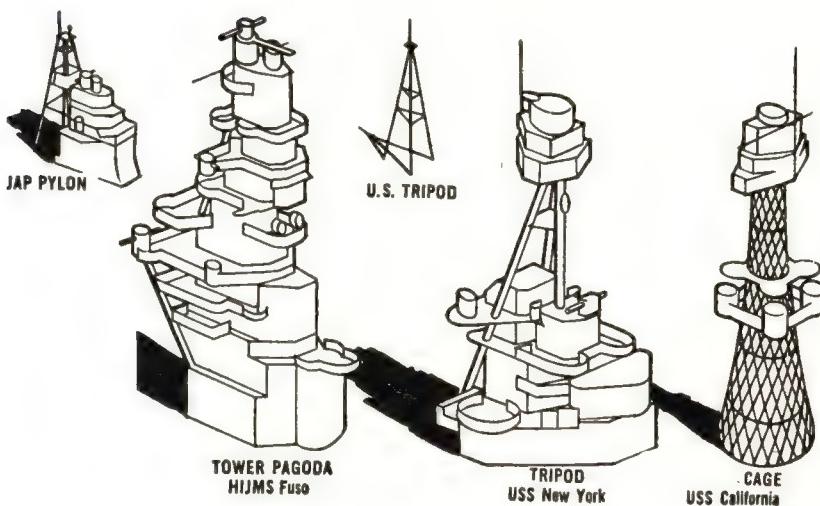


Figure 45. Multiple masts.

NAVAL ORIENTATION

STACK SECTIONS

ROUND



TEAR DROP



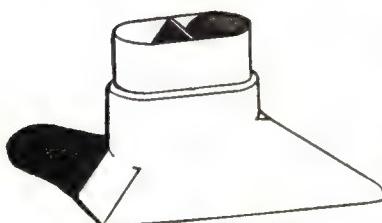
FLAT SIDED



COMBINED



COMBINED



COMBINED



JAP RAKED



LOW SINGLE PIPE



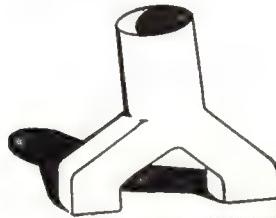
HIGH SINGLE PIPE



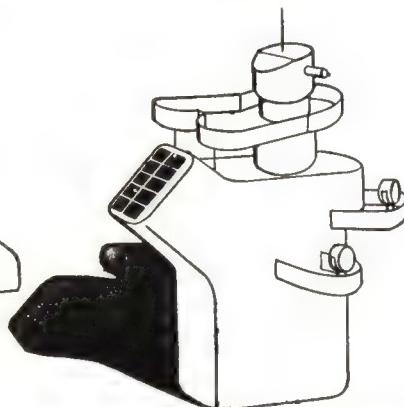
TRUNKED



JAP SINGLE

SINGLE STACKS**DUAL STACKS**

SPLIT TRUNKED



COMPLEX STACK (Richelieu)

Figure 46. Stacks.

3. Multiple mast. With supports added to the pole it becomes a tripod or other type of multiple mast. As we will note, these in turn may evolve into tower-pagodas through the addition of elements to the basic structure of the mast.

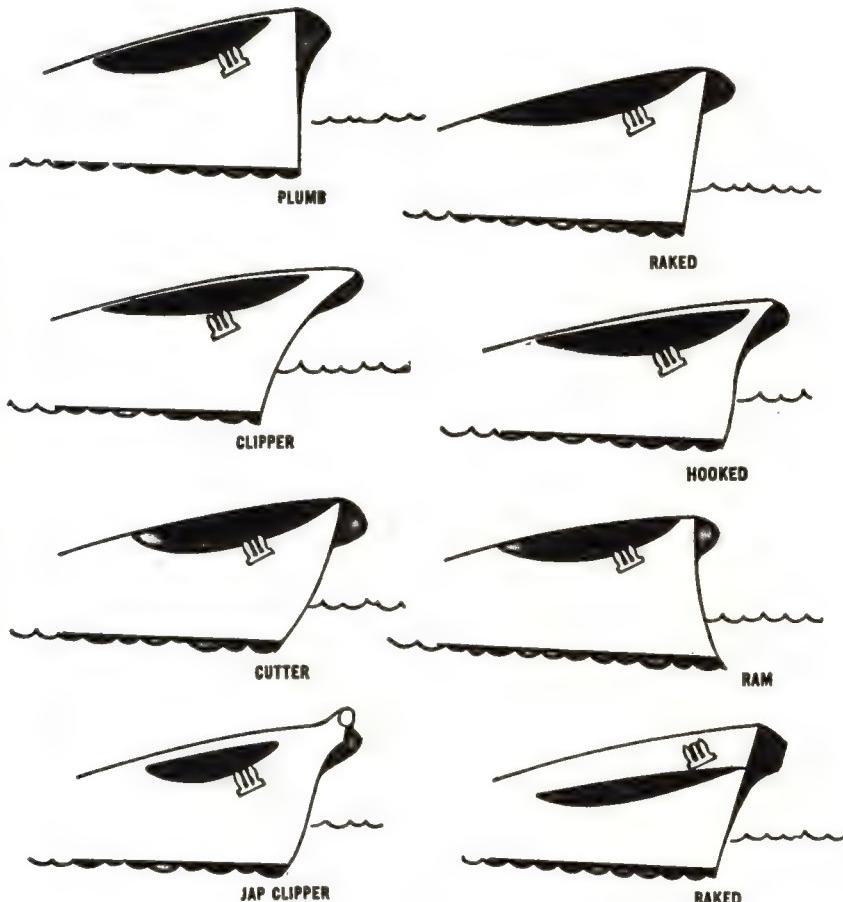


Figure 47. Bows.

8C4. Stacks. The stack most commonly observed is the single-pipe type. Stacks of this sort may be high or low, raked (slanting) or straight, and cowlings or "clinker screens" may or may not appear. These peculiarities should be observed and reported. Multi-pipe stacks fall into a number of types. Some of these are peculiar to individual navies and are, therefore, useful factors in national identification. The more common stack variants are illustrated in figure 46.

8C5. Bows. The bow and stern types that occur in fighting ships appear in

figures 47 and 48. These types are difficult to observe, and while the terms applied to them should be familiar to everyone who goes to sea, it is better not to attempt definite assignment of a bow or stern observed to a definite type, if doubt exists. In such instances it may be found advisable to note only whether a bow or stern projects beyond the waterline, forms a vertical line from water to deck, or slopes back from the waterline to the deck.

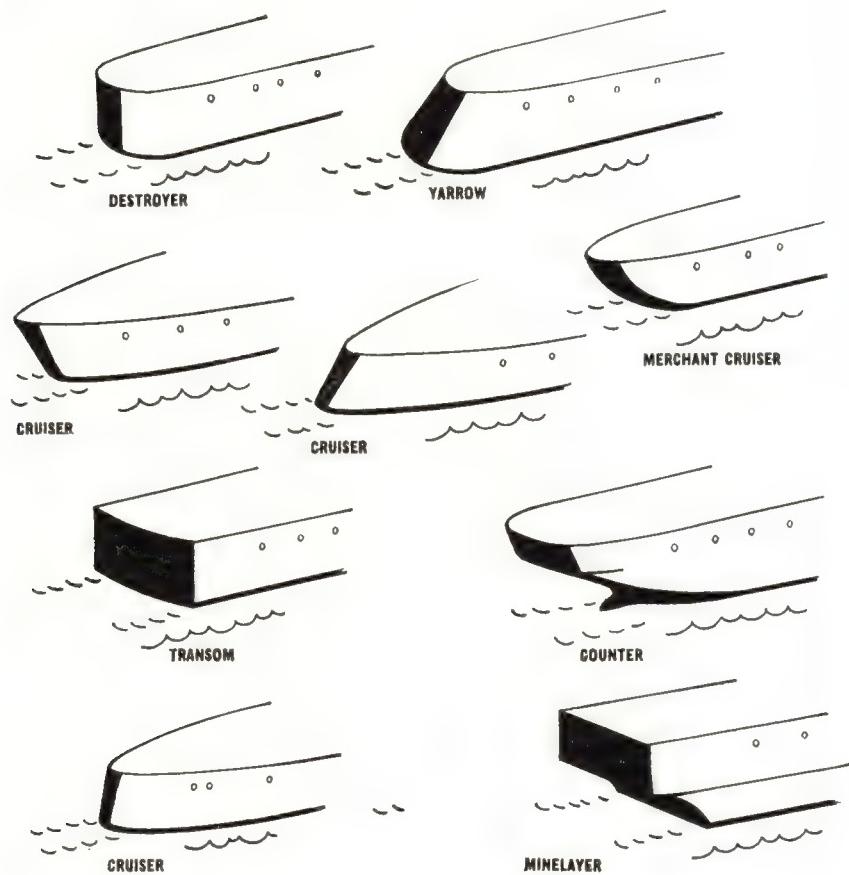


Figure 48. Sterns.

Most large warships are now designed with raking or clipper bows and cruiser sterns, although the transom sterns of United States and French cruisers are notable exceptions, as are the characteristic "hooked" bows of Japanese warships. Ram bows are survivals of an older school of naval design and invariably indicate ships built at least twenty years ago. Larger and newer United States ships are usually designed with characteristic blunted clipper bows, often difficult to distinguish from the raked type common in lighter units.

9

CONSTRUCTION OF SHIPS

A. PRELIMINARY STEPS

9A1. Design. The responsibility for the design and construction of the ships and boats of the United States Navy lies with the Bureau of Ships. The need for any specific type of ship is usually decided upon by the *General Board*, a committee composed of high-ranking naval officers. When it is considered that a certain type of vessel is necessary, the General Board, assisted by the Technical Bureaus of the Navy Department, draws up a generalized list of requirements in regard to armor, armament, speed, radius of action, and other important features.

With the general requirements as a guide, the naval architects in the *Preliminary Design Section* of the Bureau of Ships determine the displacement, principal dimensions, form, and interior arrangement of the vessel. The strength, stability, and resistance to damage are also investigated at this time. The design of any naval vessel is an infinitely complex work involving the balancing of many factors. This work is done in the form of a series of design studies, each of which is a complete preliminary design, differing from the others in the type of compromise effected among the various requirements. Sometimes as many as twenty of these studies are made before one is finally selected as the design from which the vessel will be built. This study then goes to the *Hull and Machinery Design Sections* where larger-scale and more detailed contract plans are drawn. It is at this stage that the detail features of the design are developed and many details worked out which were not included in the preliminary study. Following this, large-scale, detailed *working plans* are drawn, often in the shipyard where the vessel is to be built.

9A2. The plans. The first step in the construction of a ship is, of course, the drawing of the working plans, generally constructed to a scale of one-quarter inch or one-half inch to the foot. From these a full-scale set of plans is made in the *mold loft*. The full-scale plans are actually laid off on the mold-loft floor and from them thin wooden or hard paper *templates* (patterns) are cut for each plate and structural member necessary. The templates are taken to the prefabricating shop where the steel plates and structural shapes are cut and numbered for identification purposes.

B. BASIC STRUCTURE OF A SHIP

9B1. The plating. A ship is structurally a box girder. The *shell plating* forms the sides and bottom of this box girder and the weather deck forms

the top. The point where the weather deck and the *side plating* meet is called the *deck-edge* or *gunwale*, while the location where the *bottom plating* and the side plating meet is called the *bilge*. Usually the bottom is rounded into the side of the vessel to some degree and this rounding is called the *bilge* of the vessel. Most merchant vessels and battleships have a box-like section, with vertical sides and a flat bottom like a rowboat. High-speed vessels such as destroyers and cruisers, however, have rising bottoms and broad rounded bilges. The individual shell plates are generally rectangular in shape, the short sides being called the *ends* and the long sides being called the *edges*. End joints are known as *butts* and edge joints are called *seams*. The plates are joined together at the butts to form long strips of plating running lengthwise. These fore-and-aft rows of plating are called *strakes*. The strakes are lettered from the *keel* outward, around the turn of the bilge and up to the gunwale. The strake next to the keel on each side is called the *A-strake*. In the days of wooden ships this strake was known as the *garboard strake* but this term no longer has much meaning. The uppermost side strake, at the gunwale, is called the *sheer strake*. This strake is an important structural member of the ship and is much thicker than most of the other strakes. The shell plating, together with the weather deck, forms the watertight envelope of the vessel and its main purpose is to exclude water from the interior. It also is a major contributor to the strength of the hull structure. It is aided in these duties by the internal structural members of the hull.

9B2. The keel. The most important structural member of a ship is the *keel*. The keel is an internal structure running the length of the vessel from the *stem* to the *stern frame* along the bottom. It acts as a backbone, performing a function similar to that part of the human structure. The keel does not project below the bottom of a vessel as does the fin keel of a sailboat, but lies entirely within the ship. It is built up of plates and angles into an I-beam shape. The lower flange of this I-beam structure is the *flat plate keel* which forms the *center strake* of the bottom plating. The web of the I-beam is known as the *center vertical keel*. The height of this center vertical keel varies from about two feet in small vessels to nearly seven feet in large vessels. The upper flange of the I-beam is called the *rider plate*. If the vessel is fitted with an *inner bottom*, the rider plate forms the center strike of the inner bottom plating. At the ends of the vessel the keel is joined to two heavy castings known as the *stem* and *stern frame* which complete the backbone.

9B3. Framing. The shell plating is assisted in resisting the pressure of water, wind, and wave by two sets of stiffening members called *frames*. One set of frames, known as *transverse frames*, extends from the keel outward around the turn of the bilge and up the sides like the ribs of a human being. They are closely spaced along the length of the ship and define the form of the vessel. The other set of frames is called *longitudinal frames* or, more often, simply *longitudinals*. These structural shapes run parallel to the keel along the bottom, bilge, and side plating, and tie the transverse frames and *bulkheads* together along the length of the ship.

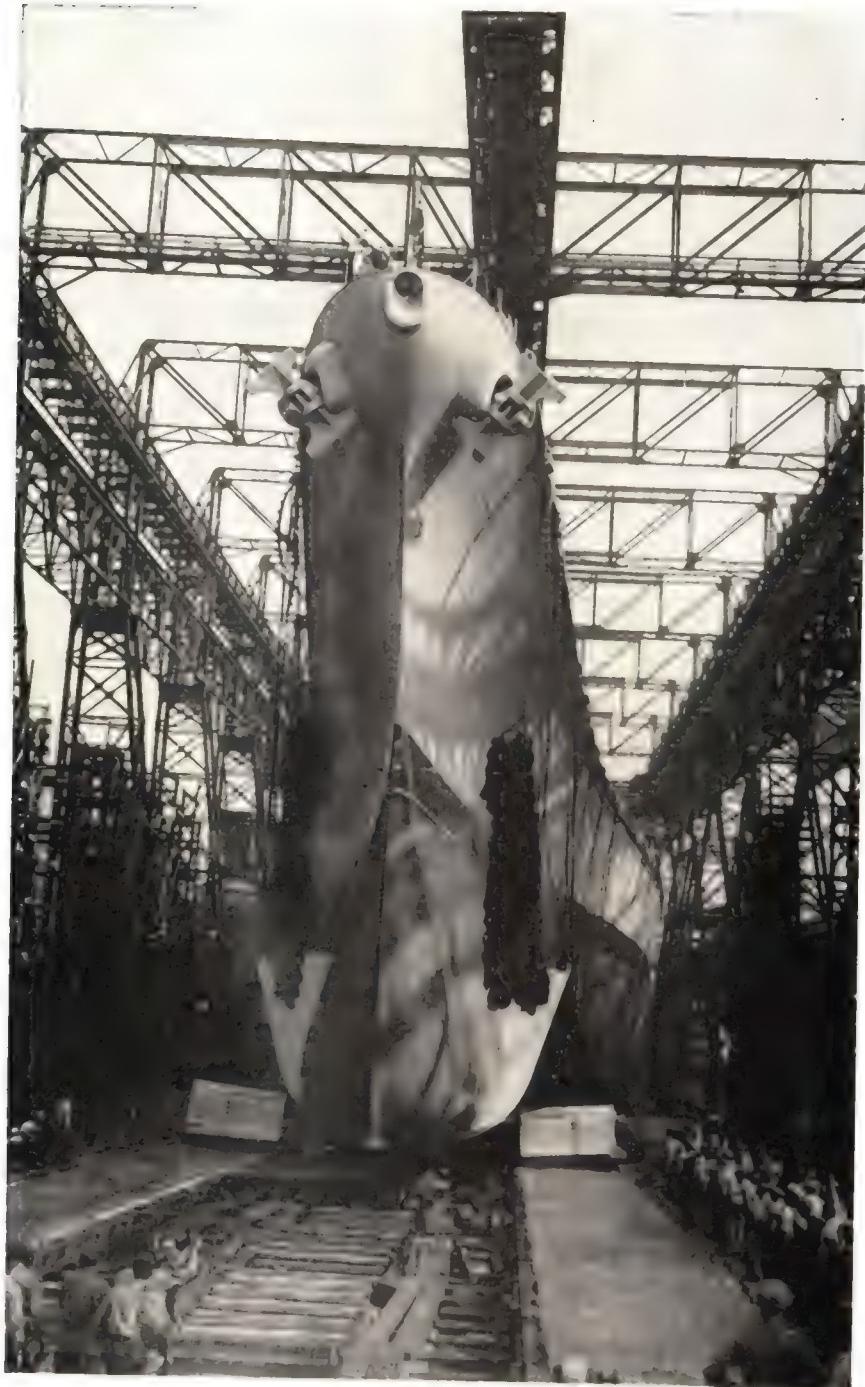


Figure 49. The massive U.S.S. Iowa is shown sliding down the ways.

Where the two sets of frames intersect, one set must be cut to make way for the other. Those which are not cut are known as *continuous* frames, while those which are cut (and thus weakened) are known as *intercostal* frames. This gives rise to two important ways of building a ship. One method is to make the transverse rib-like frames continuous and make the longitudinals intercostal between them. In this method the transverse frames are spaced very close together, say every two feet along the length of the ship, while the intercostal longitudinals are relatively few. Most merchant cargo vessels and wooden vessels are built in this fashion and they are known as *transversely framed* vessels. The alternate method is to allow the longitudinals to remain continuous along the length of the ship and make the transverse ribs intercostal between them. The longitudinals are quite numerous and the transverse frames spaced farther apart. Most naval vessels and oilers are built in this fashion and are known as *longitudinally framed* vessels. While it is a more difficult form of construction, vessels so built are stronger than those which are transversely framed. Transverse frames are usually numbered consecutively from bow and stern. Longitudinal frames are numbered from keel to gunwale.

9B4. Inner bottom and torpedo protection. The two sets of stiffening frames, *transverses* and *longitudinals*, criss-cross each other like a grating. When the frames are designed as deep plate members, like the keel, they form a box-like framework similar to a honeycomb. This method of designing the bottoms is called the *cellular* construction. The transverse frames are called *floors* when they are designed as deep girders. The longitudinal frames are still called longitudinals. On vessels larger than destroyers, this cellular *double bottom* is usually covered by a layer of watertight plating called the *inner bottom* or *tank top*. This inner bottom provides a barrier against flooding in the event that the outer bottom is ruptured by grounding, etc. It also contributes greatly to the strength of the vessel and encloses the cellular double bottoms into a series of tanks in which are carried fuel oil, fresh water, and ballast. Each tank is composed of several of the cells of the double bottom. The floors which form the partitions of the tanks are watertight or oiltight and are called *solid floors*. The floors within the tank have large holes called *lightening holes* cut in them both to save weight and to allow access to various parts of the tank. Such floors are called *open floors*. This system of *outer bottom* (or shell plating), inner bottom plating, and cellular double bottom results in a tremendously strong structure.

The double bottoms in a merchant-type vessel extend across the bottom of the vessel from bilge to bilge. The inner bottom or tank top is flat and acts as the bottom of the cargo holds. Destroyers and smaller vessels do not usually have two bottoms. Cruisers have an extensive double bottom system which extends from the keel around the bilge and up the side to above the waterline (Fig. 50). Battleships and large aircraft carriers have the most extensive systems afloat. Many battleships have *triple bottoms* to protect the vessel from mine explosions under the vessel. The double bottom systems along the sides have grown into complicated *torpedo protection systems* having from four to seven layers of cells.

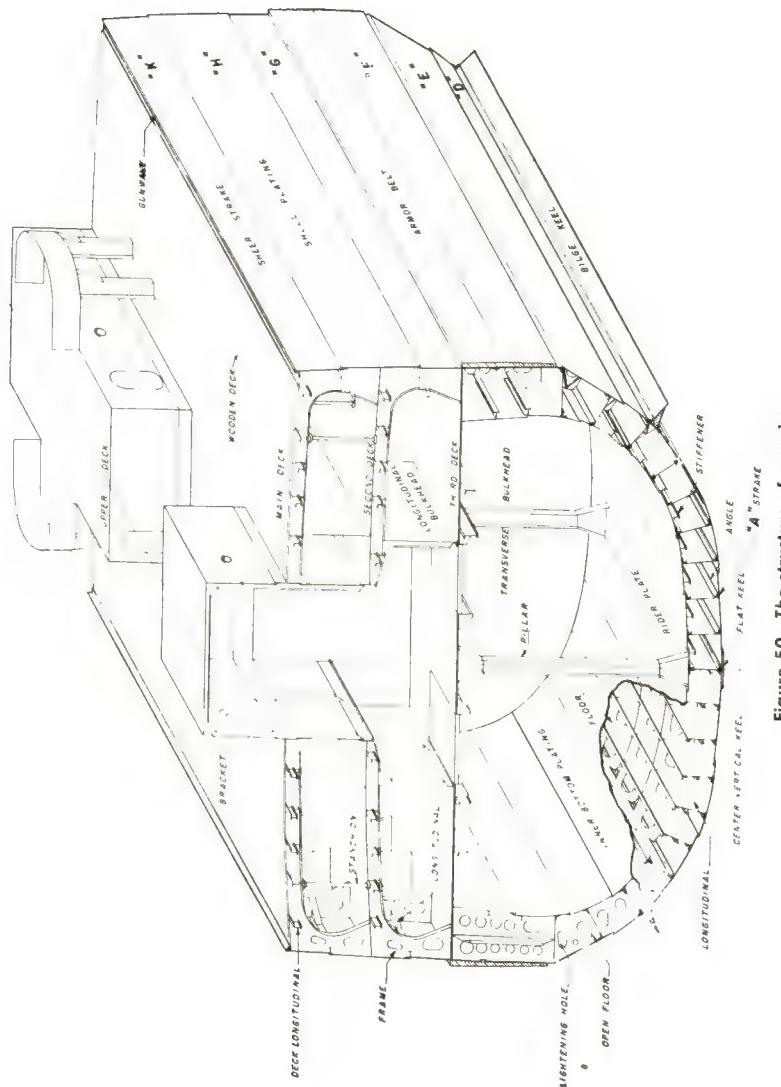


Figure 50. The structure of a cruiser.

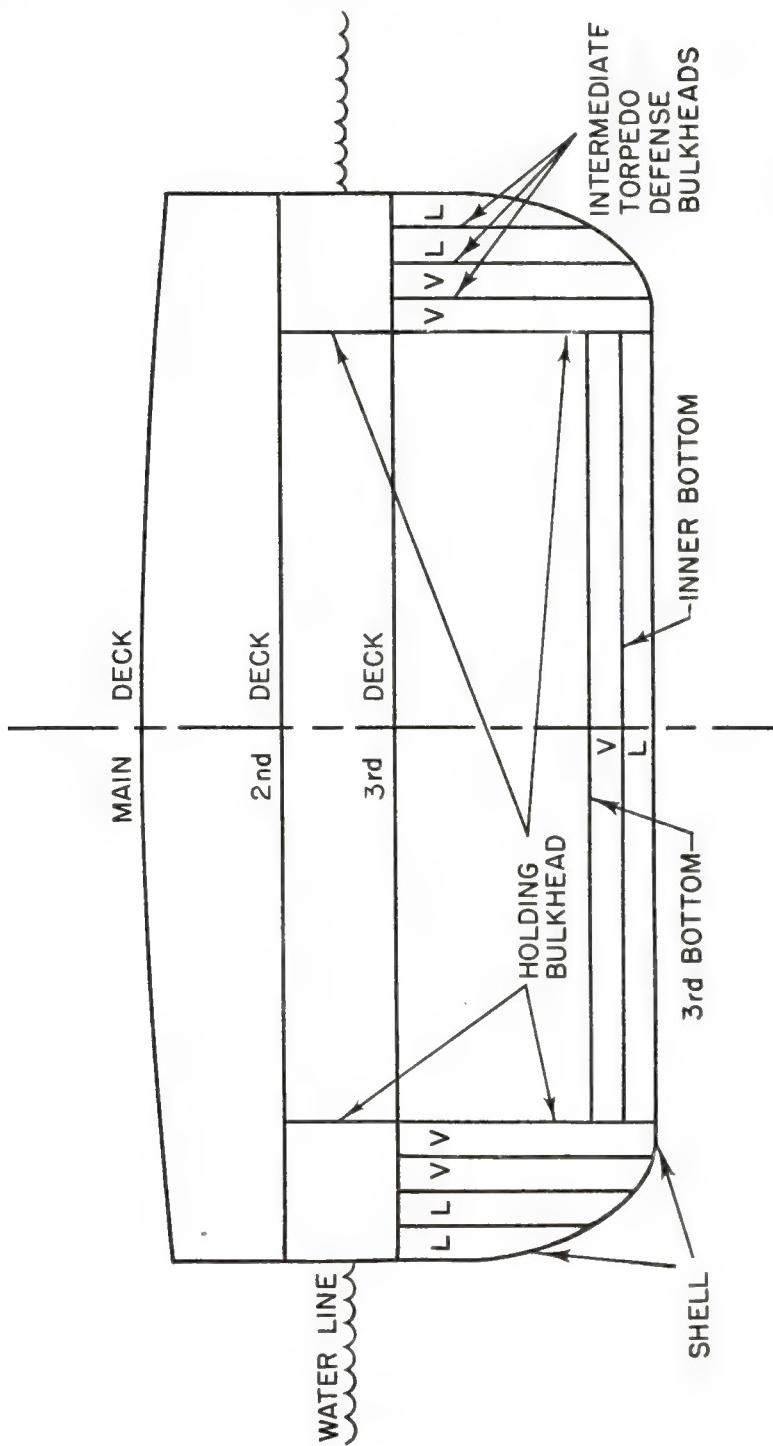


Figure 51. The above drawing illustrates the principle involved in the torpedo protection system used in certain large naval ships.

Figure 51 shows one type of torpedo protection system which has been developed as a result of extensive research, experimentation, tests, and practical experience with heavy ships hit by torpedoes. (Note: L = liquid; V = void). The inboard bulkhead is called the *holding bulkhead*; it is expected to withstand damage and deflection without leakage, even though bulkheads outboard of it are ruptured. The holding bulkhead extends from the shell at the bottom of the ship to the third deck. A lighter bulkhead continues upward to the second deck, one deck height higher than the other protective bulkheads.

When an explosion takes place the shell is ruptured with great force. As the distance into the ship increases, the destruction of structure diminishes. The intent of the design is to construct the system so that each of the torpedo defense bulkheads will stretch as far as possible, and absorb a maximum of the energy of the explosion before letting go. This so weakens the effect of the explosion that by the time the remaining force reacts upon the holding bulkhead, the latter is strong enough to withstand the resulting distortion without failure. Thus, flooding of the vital inboard spaces is prevented (although wing voids may flood over a considerable length).

At the same time, it is necessary to suppress the fragment and flash. Experience has proved that one deep layer of liquid, either oil or water (several feet in transverse depth), or two shallower layers of liquid somewhere in the system, are required to impede large fragments of shell plating and other structure produced by the explosion sufficiently to prevent fragment damage to interior bulkheads and extension of flooding. Flash effect should also be eliminated.

9B5. Bulkheads. The interior of the vessel is divided into compartments by vertical walls called bulkheads. Bulkheads are either watertight *structural bulkheads* or merely partitions or *joiner bulkheads*. Structural bulkheads give the ship contour, shape, rigidity, and strength. They serve to divide the ship into numerous watertight *compartments* or rooms. They may be transverse bulkheads, extending athwartships, or longitudinal bulkheads, extending fore and aft. They not only subdivide the ship but serve to tie the shell plating, framing, and decks together in a rigid structure. Transverse bulkheads are numbered to correspond with the transverse frames which they replace.

9B6. Decks. The ship is divided horizontally by a series of *decks* and *platforms* into tiers of compartments, the decks forming the floors and ceilings of the compartments just as the bulkheads form the walls. However, the floor of a compartment is always called the *deck* and the ceiling is always called the *overhead*. This is because the words floor and ceiling have other meanings on board ship. As we have already learned, a floor is a transverse partition in the double bottoms. The *ceiling* is a wood sheathing in the cargo hold and is used to protect the cargo from damage which might result if it were to strike against the steel structure of the vessel.

The deck is composed of rectangular steel plates joined into strakes similar to the shell plating. The plates in the outermost strake of deck plating, which are called the *stringer plates* and are connected to the shell plating, are important

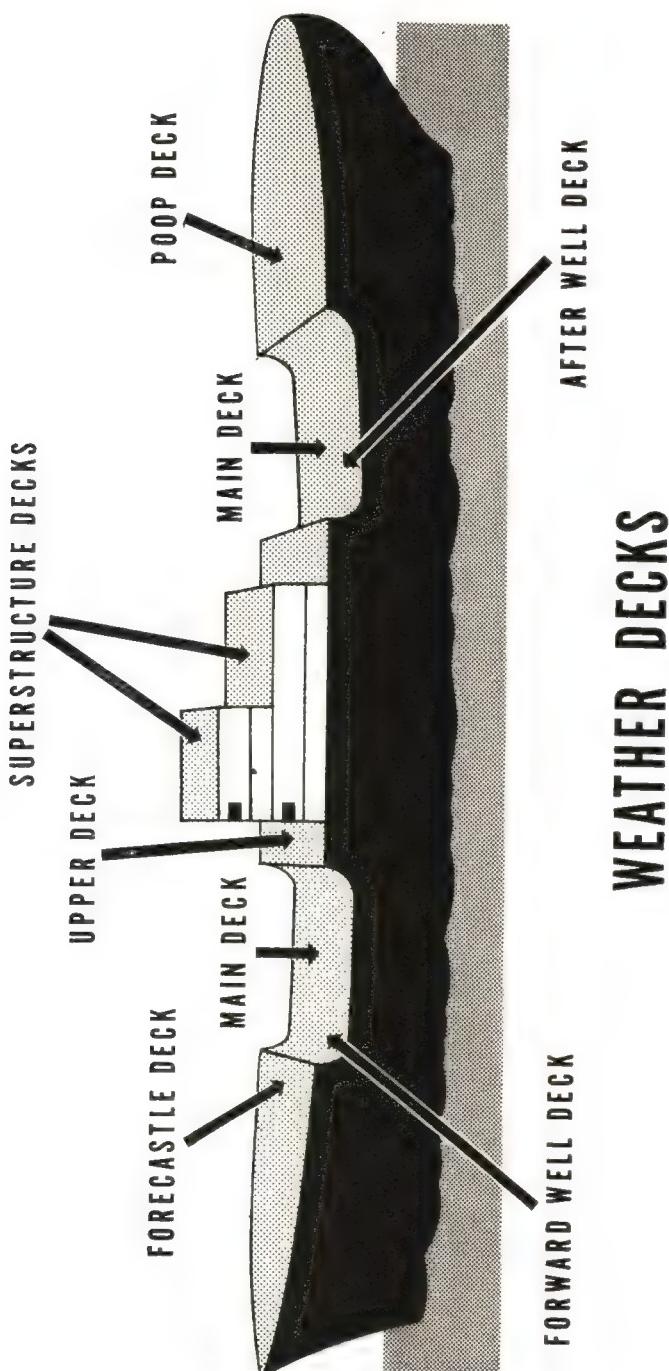


Figure 52.

structural members in the ship. The deck plating is strengthened by transverse and longitudinal *deck beams* and *deck girders* on the underside of the deck. These beams and girders are usually composed of I-beams or channel beams. They are fastened to the shell frames by means of triangular steel *brackets*. The weather deck is usually covered by a wooden deck which provides insulation to below-deck spaces and offers safer footing to the crew in wet weather. The decks above the waterline are usually arched so that they are higher at the centerline than at the deck-edge, to aid in drainage of occasional water. This arch is called *camber*.

A deck is named in two ways; first, by its position in the ship and, second, by its use or function. Decks extending from side to side and from stem to stern are *complete decks*, while decks occurring only in certain portions of the vessel are called *partial decks*. The uppermost complete deck is called the *main deck*. The complete decks below this are called the second deck, third deck, etc., normally being numbered downward. Partial decks which occur in only one portion of the ship have special names, such as:

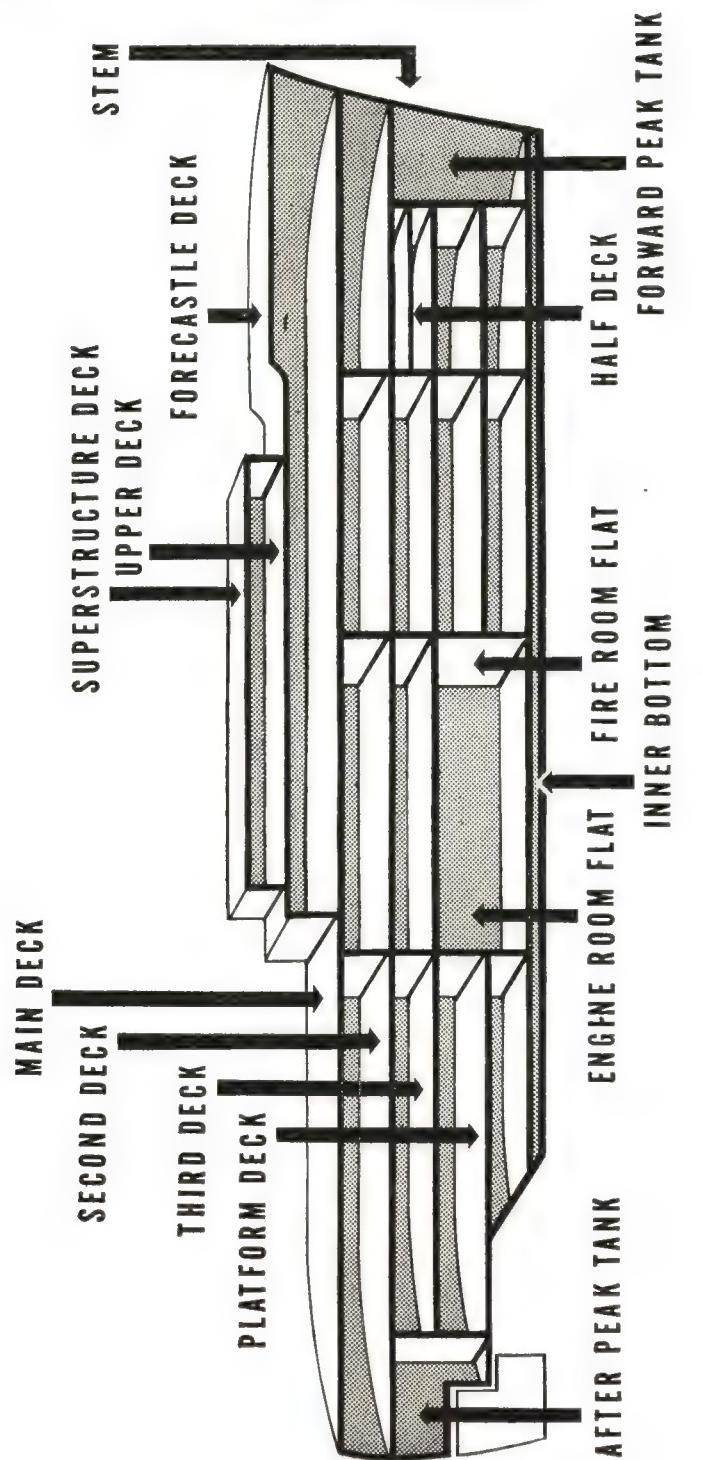
- a. *Forecastle deck*: a partial deck above the main deck at the bow.
- b. *Half deck*: a partial deck below the main deck at the bow only.
- c. *Upper deck*: a partial deck above the main deck amidships. It is part of the superstructure unless the side plating is carried up to its level. (Additional decks above this in the superstructure are usually named for their use, as: *communication deck*, *signal bridge*, or *navigating bridge*.)
- d. *Poop deck*: a partial deck above the main deck in the stern, usually only in merchant ships.

Partial decks which occur in the bow and stern portions of the vessel below the lowest complete deck, but which are broken to provide for the machinery spaces, are called *platforms*. These are numbered downward, as *first platform*, *second platform*, etc. The inner bottom is usually called the *hold*. Miscellaneous *working platforms* or *flats* consisting of gratings are located in the machinery spaces to aid in the operation of the ship's engines.

In addition to the above nomenclature, some decks are known by names describing their use or function. Thus, the uppermost deck extending from side to side in any portion of the vessel is known as the *weather deck*. The deck which carries heavy plating to resist enemy projectiles or bombs is called the *protective deck* or *armor deck*. A subsidiary protective deck is sometimes installed having light armor plating and located just below the armor deck to protect the below-deck vital spaces against fragments. This deck is known as the *splinter deck*.

C. SHIPBUILDING PROCEDURE

9C1. The ways. The procedure followed in building a ship varies widely, depending on the type of ship, by whom it is built, and whether it is predominately of riveted or of welded construction. In general, however, the primary operations are similar. The ship normally is built on a sloping concrete platform called a *way*. The slope of the way is called its *declivity*. The way is



DECKS

Figure 53.

sloped so that when the ship is *launched* it will slide into the water under its own weight. A row of *building blocks* is placed down the center of the way upon which the keel is erected. These blocks are high enough so that workmen can work under the hull while the ship is being built. A wooden *cradle*, shaped in the form of the shell of the ship from the keel to around the turn of the bilge, is then erected on either side of the building blocks. *Bilge cribs* are placed along the bilge at intervals to support the weight of the sides as the vessel is built. As the hull is erected, scaffolding is raised along the sides to facilitate construction.

9C2. Subassembly bays. The modern practice is to assemble rather large portions of the ship in subassembly bays located some distance from the ways. At one point all the bulkheads are constructed, complete with stiffeners and other fittings. At other bays, whole sections of the side plating with frames attached are welded. Complete sections of double bottoms, consisting of shell plating, transverse floors, longitudinals, and inner bottom, equipped with piping and valves for the tanks and other fittings, are assembled at other points. Large gantry or "whirly" cranes carry these subassemblies, some of which weigh as much as 50 tons, to the way where they are erected into the ship.

9C3. Erecting the ship. There are various sequences used in erecting a ship, depending upon the type and size of the ship, whether it is of riveted or welded construction, and facilities for subassembly. However, there are certain basic principles which must be adhered to and the following is a typical example of modern practice. The fundamental precept for erecting both subassemblies and the ship as a whole is to work from the center, progressing from inboard to outboard and simultaneously forward and aft. The first operation in building a ship is to place the flat and vertical keel sections on the building blocks and to connect the butts either by riveting or by welding. Next the double bottom sections are placed on each side of the keel, starting amidships and working forward and aft. The double bottom sections are jacked into position and welded or riveted to the keel. As soon as the double bottoms are in place, the main transverse strength bulkheads are erected in place. Generally some longitudinal deck girders and longitudinal bulkheads are placed next to steady the main transverse bulkheads in afore-and-aft direction. The side framing and shell plating are then placed in position and fastened to the existing structure. The frames are connected to the double bottoms. As soon as the side shell is in place, the decks, beginning with the lowest, are placed in position and connected to the shell frames and to the transverse and longitudinal bulkheads.

If the vessel is to be armored against gunfire and bombs, the armor must be *worked into* the ship as the construction progresses. In vessels having light armored decks, such as cruisers, the deck is merely thickened and composed of armor plate. The heavy deck armor of a battleship, however, is placed on the ordinary steel deck. Since its great weight prevents it from shifting, it is seldom fastened to the deck plating. The individual armor plates are keyed together to form a cohesive whole. Heavy *belt armor* is installed on large naval vessels

which extends from several feet above to several feet below the waterline. These armor plates are hoisted into position and bolted to the shell plating. The whole armor belt is keyed together also.

As the building process progresses from amidships toward the ends, the stern frame assembly is erected and the double bottom and side shell are carried aft to join this assembly. The whole bow section is usually constructed at a sub-assembly point and placed in position rather late in the building schedule. The last steps in the pre-launching construction schedule are the installation of propeller shafts and machinery and the painting of the exterior of the vessel. Large vessels are usually from one-half to three-quarters complete when launched.

9C4. Launching. Launching calculations are undertaken in the drafting room even prior to the laying of the keel in order to determine the best position on the ways for building the ship, as well as the method of launching and the proper time to launch. Several months before launching, the shipwrights begin the preparation of the launching ways and all the preparatory work required to shift the weight of the vessels from the keel blocks, shores and cribs to the launching ways.

When the U.S.S. *Wisconsin* was launched in 1943 the enormous task required a total of 62 distinct operations beginning more than 24 hours before the ship slid down the ways. The task involved transferring the weight of the huge ship from hundreds of timber shores and keel blocks to the ways. There were two types of ways, fixed and sliding. The *Wisconsin* rode down into the water on four fixed ways, each serving as a track. Mounted atop the fixed ways were the sliding ways, which served much the role of runners on a sled. The sliding ways were secured to the ship by temporary fastenings. Months before the launching, the fixed ways were lubricated with nearly 100,000 pounds of heavy grease to ease the big ship on her first trip.

One of the first phases of transferring the *Wisconsin's* weight from the timbers shoring her up to the sliding ways was "wedging up." This consisted of driving scores of long wooden wedges under the ship, at right angles to her, in such a way as to force the sliding ways hard up under the ship and hard down on the fixed ways. Meanwhile, more than a thousand workmen gradually removed the shoring and cribbing in accordance with carefully timed planes, made several months earlier.

The *Wisconsin* was now ready to slide down the incline of the fixed ways by her own sheer weight. Holding her back, however, were a series of six mammoth triggers whose upper ends were hooked into the sliding ways. The signal to launch was flashed simultaneously at the sponsor's stand, high above the waiting throng, and in the trigger pit. With the releasing of the triggers, the ship was off. The *Wisconsin* took an estimated 30 seconds to slide into the water.

Sponsors. The name of the ship is chosen by the Secretary of the Navy, upon recommendation of the Chief of Naval Personnel. The system followed in naming ships is described in section 7C2 of this volume. The sponsor for the vessel is designated by the Secretary of the Navy in accordance with naval customs and



Figure 54. Launching of the cruiser U.S.S. Flint.

tradition. In the selection of sponsors for battleships, the governor of the state is usually extended an invitation to nominate a woman to christen the ship. The mayor of a city is customarily extended an invitation to nominate a sponsor for the cruiser named in honor of his city. Aircraft carriers, for the most part, are sponsored by the wives of naval personnel associated with aviation; and submarines by wives of personnel associated with the submarine service. Sponsors for vessels named in honor of personnel are usually the nearest female relatives of the persons for whom those vessels are named. The commandants of naval districts have been authorized to designate sponsors for some of the smaller vessels built within their districts and to consider among others the wives and daughters of shipyard personnel who have been outstandingly active in promoting the war effort by contributing to the rapid construction of these vessels.

The ceremonies. At the time of the launching, the sponsor, and naval officers, officials of shipbuilding companies, and the commandant, or his representative, of the naval district in which the vessel is being built, assemble on a flag-decorated platform erected for the occasion at the bow of the ship. If a battleship is being launched, very often the governor of the state which is honored delivers one of the several addresses. Usually the chaplain of the navy yard, or district, is a member of the party, and just before the ship is started on her first journey, he offers a prayer for those who are responsible for our government and the officers and men in our Navy. For the ship's future service, he asks, "May this new vessel of our Navy be guarded by Thy gracious Providence and care. May she bear the sword to bring peace on earth among the Nations. Let her be a terror to those who do evil and a defense to those who do well."

The band plays the national anthem, flags and pennants wave, and as the ship begins to move, the sponsor breaks upon her bow a gaily wrapped bottle of wine, or water, saying, "I name you —— in the name of the United States," and frequently adds, "May success always attend you."

At the launching of several of our aircraft carriers, pigeons were released during the christening ceremonies and squadrons of airplanes saluted from the sky. Frequently blossoms of the chosen flower of the state honored are showered upon the battleship.

9C5. Fitting out. After the christening, the ship continues to move down the ways until she slips into the water, gliding slower and slower until she loses almost all motion. Then the tugs rush to her sides, and tow her to a *fitting-out pier*. Here giant cranes move the heavy machinery into the ship. The superstructure, masts, guns, turrets, and other equipment are placed on board. Machinery which was not previously installed is placed in position. Living quarters, galleys, messing compartments, and other spaces are painted and fitted with furniture and equipment. There are innumerable items that must be installed on board before a ship is pronounced complete and ready for commissioning. Five or six months may elapse between launching and commissioning of larger ships.

9C6. Commissioning. When the ship is ready for commissioning, personnel, not already on hand, who are to form her crew, are ordered to the local navy yard by the

Navy Department. Orders are given to the commandant of the naval district, or of the navy yard, where she is building, to place her in commission.

On the day appointed, her officers and crew in dress uniform assemble on her decks. The commandant and members of his staff are present. While the band plays and all stand at attention, the commandant orders the national ensign hoisted to designate her as a ship in the official service of the government. The commission pennant is unfurled at the mainmast.

Then the commandant formally turns the ship over to the prospective Commanding Officer. The latter reads aloud his orders from the Navy Department to command the ship. His first order is "Set the Watch." The officers and crew take their stations in the new ship.

After a short period of preparation the ship is ready for the shakedown cruise which will last several weeks. The ship will be tested for seaworthiness, speed, endurance, and ability to maneuver and all of her equipment will be adjusted to suit operating conditions. The shakedown cruise is also utilized for training the ship's personnel. Upon completion of this cruise, the ship returns to the outfitting yard for further changes and additions as found necessary. Most ships built on the East coast then proceed to Rockland, Maine, for standardization trials over the measured mile. These are conducted by the Board of Inspection and Survey. Careful checks are made of the vessel's fuel consumption, speeds, propeller revolutions, and other factors to set a standard for the service operation. Upon completion of these trials, and any additional minor items of work found to be necessary, the vessel is ready to leave the outfitting yard and join the Fleet.

D. COMPARTMENTATION

9D1. Compartmentation. The decks and bulkheads of a vessel divide the interior into many watertight rooms or *compartments*. In a cargo vessel there are few decks and the bulkheads are wide-spaced. The resulting compartments are designated by their primary purpose such as *cargo holds*, which are large enough to accommodate, in some cases, a huge amount of cargo. Passenger vessels have smaller holds, the remainder of the space being divided by decks and bulkheads into smaller living compartments for passengers. Naval vessels are more extensively compartmented than merchant vessels as a whole. This is because their watertight compartmentation is more than a matter of dividing or segregating the various activities aboard a ship. The ability of a naval vessel to withstand damage depends to a large part upon its compartmentation. In case of damage, the watertight boundaries of the compartments restrict the flooding waters, standing as a barrier between them and the undamaged portion of the vessel. The more minute the compartmentation, the smaller is the amount of sea water which will enter the vessel through a rupture in its shell plating. In naval vessels this compartmentation reaches its highest development in the battleship, which of all men-of-war is capable of taking the most punishment.

9D2. Watertight integrity. In the previous paragraph only *watertight* compartments were discussed. If a compartment is not watertight, its usefulness as

a barrier to further flooding of the vessel is nil. This quality of watertightness is known as watertight integrity. If the watertight integrity of a compartment is high, it will be effective in limiting the extent of flooding due to damage; if it is low, it may be useless. The battle to maintain the watertight integrity of the ship as a whole is a complicated and never-ceasing one. The waking hours of a considerable number of any naval ship's crew are concerned in one way or another with the ceaseless patrol and inspection that are necessary to keep the watertight integrity high and the vessel in battle trim. The boundaries of each watertight compartment are pierced not only by the more obvious doors and hatches, but by countless holes to accommodate water, steam, oil and air piping, electric cables, ventilation ducts, and other necessary utilities. Each such hole must be plugged by a *stuffing tube*, *pipe spool*, or other device to prevent water from leaking in around piping and cables. Piping and ventilation ducts must be equipped with cutoff valves or other closures at each main bulkhead in case the piping or duct itself is damaged. Rigid restrictions against opening watertight doors or hatches during action or in dangerous waters are enforced. All of these "defensive" precautions must be taken to insure the full use of the fighting qualities of the vessel and the complete destruction of the enemy.

9D3. Designation of compartments and divisions. From forward aft, United States naval vessels are cut by transverse bulkheads into three or four divisions labelled *A*, *B*, *C*, and *D*. In a three-division ship, *Division A* extends from the stem to the forward transverse bulkhead of the forward machinery compartment. *Division B* includes the space from that bulkhead to the after bulkhead of the after machinery compartment. *Division C* comprises the remaining space aft. In a four-division ship, the boiler and engine room compartments are divided into two parts, *Divisions B* and *C*, with *Division D* comprising the remaining space aft. Note that while the ship is considered to have only three or four main divisions, this does not mean that there are only three or four transverse bulkheads. There are many others, all supporting the structure of the vessel and contributing to its compartmentation and watertight integrity.

All compartments on board ship are designated by various letters and numbers to indicate their location and use; for example, a compartment might have the following designation, B-215-L. The first letter indicates the division in which the compartment is located. The first numeral of the three-numeral group shows what deck it is on, and the last two numerals of the group show the number of the compartment within the division. Odd numbers are used for compartments on the starboard side while those on the port side are shown by even numbers. In this particular case, the compartment is the eighth in Division B from the forward transverse bulkhead on the starboard side and on the second deck.

As a general rule, compartments on the main deck are numbered from 101 to 199 in each division beginning at the forward end of the division. Compartments on the second deck would be in the two hundred series, those on the third

deck in the three hundred series, those on the superstructure deck from 001 to 099. The series 901 to 999 is used for double-bottom compartments. Compartments on half decks have the same numeral as the deck below but are indicated by the letter "H" which is added after the division letter; i.e., BH-215-L.

To define further the contents or use of a compartment, the numeral group is followed by a designating letter. In the example cited, the letter L stands for living quarters. Other letters used and their meanings are as follows:

M—ammunition	W—water	V—void	A—storeroom
E—machinery	F—fuel	B—guns	

For compartments extending from the inner bottom up through two or more decks, the designation is the division letter followed by a number in the series 1 to 100. Examples of compartments of this type would be the engine room, fire-room, peak tank, or cargo hold. Thus a boiler room might have the designation B-1 or C-1.

Every door, hatch, manhole, or other means of ingress to a compartment has a metal label on it which gives the door's number and location plus a description of what is in the compartment and the compartment's letter and numeral designation just discussed. An example is:

W. T. D. 4-16-6
C. P. O. Stores
A-412-A

W.T.D. stands for watertight door. The "4" indicates that it is on the fourth deck, the "16" that it is just abaft the sixteenth frame, and the "6" that it is the third opening, from inboard out, on the port side. You would also know that the compartment was a storeroom for C.P.O.'s located in Division A and that it was the sixth compartment on the port side from the bow.

10

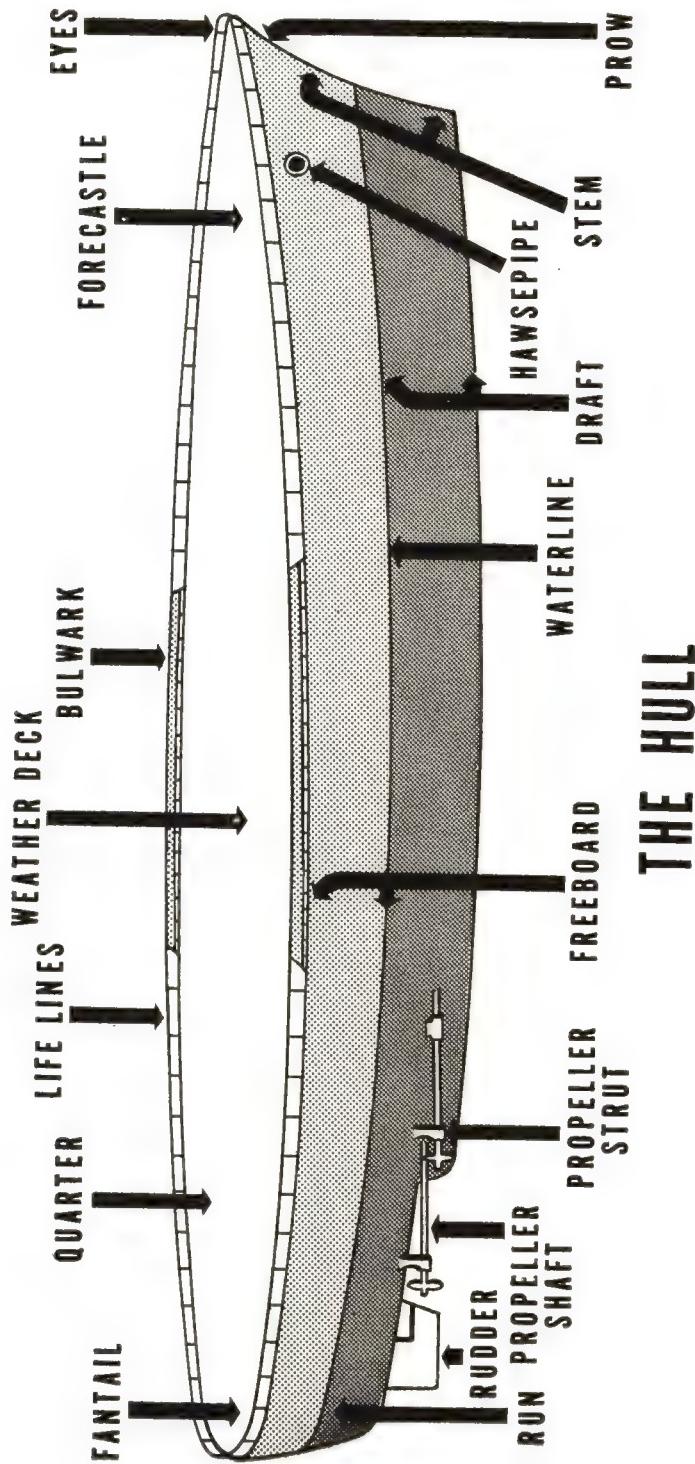
EXTERNAL EQUIPMENT OF SHIPS

A. THE HULL

10A1. General terms. In the description of a ship, the term *hull* usually includes her interior framework, her inside and outside plating or planking, her decks and bulkheads, and any deck-houses (but does not include masts, rigging, equipment, and items generally classed as *superstructure*). For the purpose of this section we shall consider the hull as a single watertight shape covered on top with a deck, or with parts of several decks, called roughly the *weather deck*. The right-hand side of the ship when looking from aft forward is the *starboard* side. The opposite side is the *port* side. *Amidships* is in the vicinity of the middle portion of a vessel as distinguished from her ends. The term is used to convey the idea of general locality but not that of definite extent. The edges of the weather deck from the bow to the stern are usually guarded by light cables or chains called *life lines*, or by an extension of the shell plating of the ship above the deck edge, called *bulwarks*. The *waterline* is the line to which a hull sinks when in the water. The vertical distance from this line to the lowest exposed deck edge is the *freeboard*. *Draft* is the depth to which a hull sinks in the water. Since the drafts forward and aft may differ under various conditions of loading, numbers are painted on the sides of the ship at both bow and stern to measure the drafts. The relation between the drafts forward and aft is called the *trim*. Most ships are constructed in such a way that these two drafts are equal when they are *in trim*. (Trim is the angle to the horizontal in which a vessel rides.) Some vessels, notably landing craft, may be designed to have a much smaller draft forward than aft. When unusual conditions of loading or underwater damage cause a ship to be *out of trim*, she is said to be "down by the head" or "down by the stern." Trim may be adjusted by filling or emptying *peak tanks* in the bow and stern of the ship.

10A2. Fore part of the hull. The general area of the weather deck in the forward part of the ship is the *forecastle*. The nearly vertical structural member of the hull at the bow is called the *stem*. The bow structure above the waterline is known as the *prow*. The part of the weather deck nearest the stem is called the *eyes* of the ship. (Under conditions of reduced visibility at sea a special lookout is normally stationed in the eyes of the ship.)

10A3. After part of the hull. The *quarter-deck* is that part of the main or other appropriate deck set aside for the conduct of official and ceremonial functions. It is normally aft. The deck area at the stern of the ship is the *fantail*.



THE HULL

Figure 55.

The part of the ship which literally overhangs the water and extends abaft the rudder is the *overhang*. In the after part of the vessel the hull usually narrows considerably; this narrowing is the *run* of the ship. Below the waterline are the *propeller shafts*, the *propellers* or *screws*, and the *rudder*. In multiple-screw ships, the propeller shafts project to such an extent that they must be supported by braces extending from the hull, called *propeller struts*. To protect the propellers, metal frames called *propeller guards* are built out from the hull above the water. Otherwise, because of the run of the ship, the screws might be damaged when the ship is close by a pier.

B. ORDNANCE EQUIPMENT

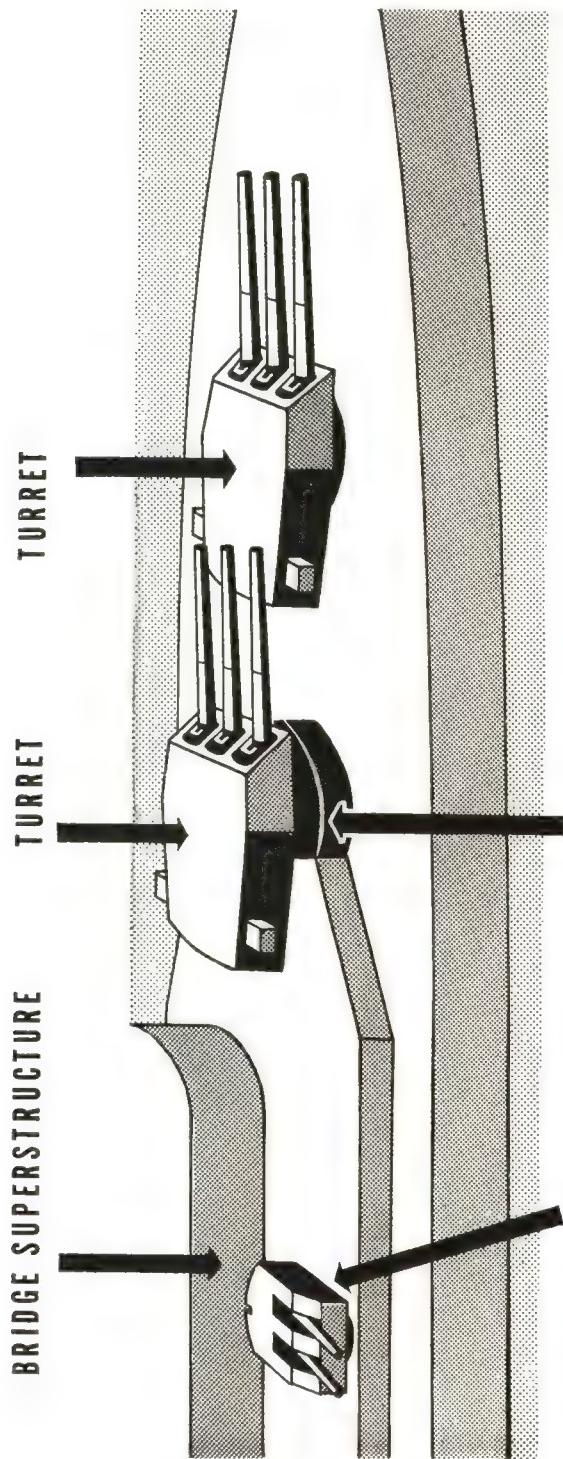
10B1. Weapons used by naval vessels and aircraft. The types and amount of ordnance equipment carried by a ship or aircraft are determined by the purpose for which it was built. While most of the ordnance equipment now in use employs the same principles which have been known for many years, it has nevertheless been considerably improved upon to adapt it to the needs of modern warfare. Perhaps one of the greatest advances has been in the accuracy with which the missiles are projected, making possible the extreme effectiveness of our B-29's over Japan, our subs in the south Atlantic, and wherever else our ships or aircraft have aimed a gun at an enemy target.

The principal weapons used by naval vessels and aircraft are: guns, torpedoes, mines, depth charges, bombs, and rockets.

10B2. Guns. The gun is the oldest of the weapons mentioned in point of service in our Navy and is the one most frequently encountered on vessels. Improvements in the construction of guns and in the explosives used with them during the last century, and particularly since 1900, have revolutionized gunnery by tremendously increasing the destructive power and effective range of these naval weapons. During the Revolutionary War, for example, our vessels fought at ranges of only several hundred yards using cast-iron guns, without sights. These were inaccurate and threw solid shot which, on striking the target, failed in most cases to penetrate the side, simply imbedding themselves harmlessly in the timbers. The modern rifled guns ranging up to 16-inch guns are unbelievably accurate and hurl explosive shells with great destructive power over battle ranges which may run up to more than 20 miles. Radar (radio detecting and ranging) permits detection of distant masses, e.g., planes or ships, and is used with gun directors for automatic aiming.

Guns are the principal weapons carried by battleships, cruisers, aircraft carriers, and auxiliary vessels. (Excepting hospital ships, all naval vessels and aircraft carry some type of gun.) Even merchant ships, during war, are equipped with guns which are usually manned by United States Navy crews.

Fire control, in a broad sense, refers to the entire process of utilizing a ship's armament. It involves the material, personnel, methods, communications, and organization necessary to inflict upon the enemy maximum destruction in minimum time. By custom, fire control refers only to the control of guns, while



FIVE INCH-38 CALIBER ENCLOSED BARBETTE
MOUNT, SECONDARY BATTERY

BATTLESHIP ARMAMENT

Figure 56.

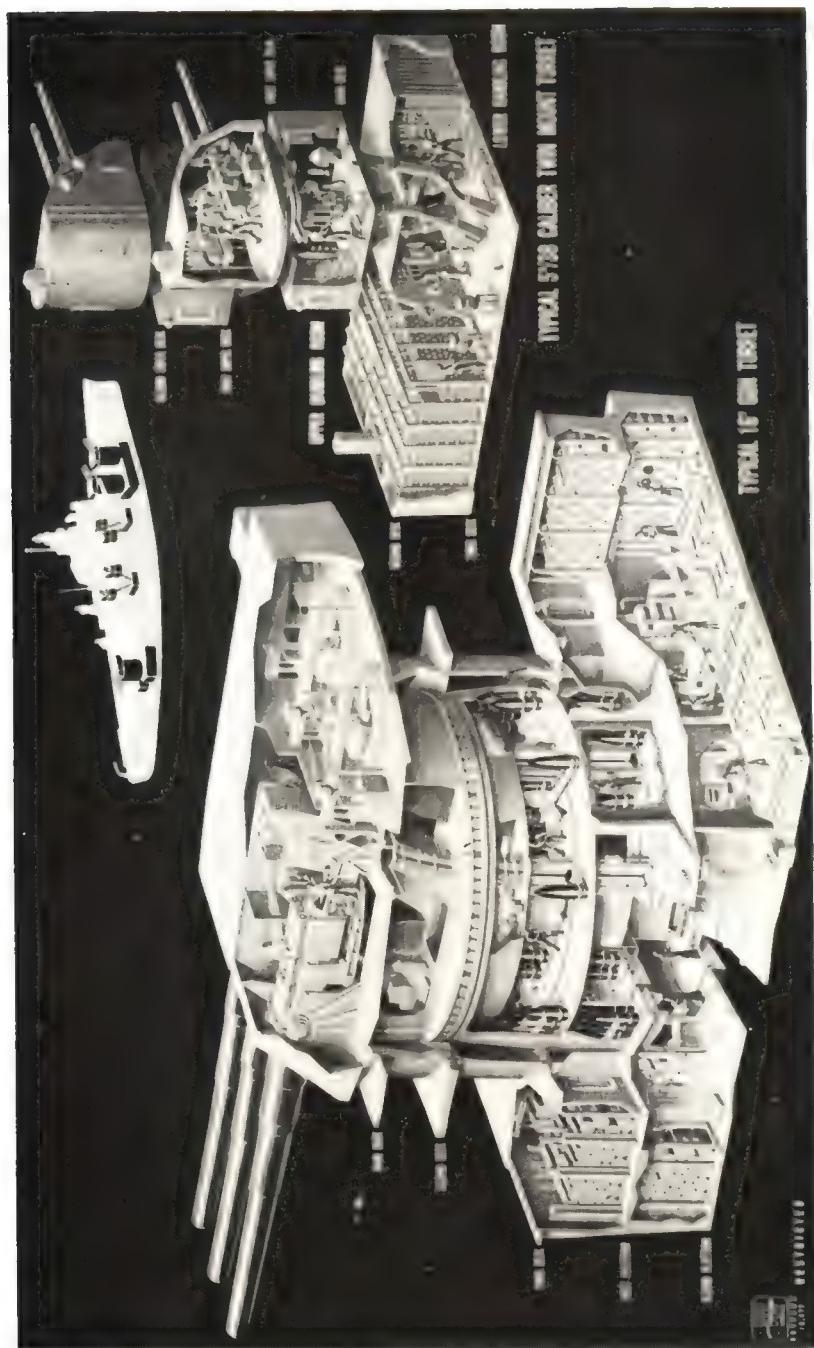


Figure 57. An exposed view of typical gun turrets and auxiliary apparatus showing the flow of ammunition from the handling rooms to the breech of the guns.

more specific terms such as *torpedo control*, *mine control*, and *depth-charge control* are used in designating the regulation of other weapons.

Although cannon have been used for centuries, fire control in anything approaching its present form is a comparatively new development in gunnery. At the close of the nineteenth century, fire control was beginning to take on the aspects of a science. However, it is noteworthy that the only fire-control instrument, other than sights, in use at that time was the *stadimeter*, adopted in 1898 as a range-finding instrument.

As improved fire-control methods and equipment developed, the accuracy of gunfire, and consequently the effective ranges increased tremendously. Before 1900 most engagements were fought at very short range, within several hundred yards. At the battle of Tsushima in 1905 (Russo-Japanese War), the range varied between about 4,000 and 6,000 yards. By 1910 our Navy was holding battle practice at 12,000 yards with reasonable accuracy. At the Dogger Bank engagement in 1915, the opening range was between 18,000 and 20,000 yards. At the end of World War I, long-range practices were conducted at about 24,000 yards. Recent developments in ranging and computing instruments, and in gun construction, have raised the range limits to well over 35,000 yards.

Fire-control apparatus is that equipment used in the control of a ship's gunfire. The more intricate devices are below decks in a protected position, but much of the equipment must necessarily be topside. On the larger ships with heavy masts, some of this equipment may be located in the foretop or maintop and some on separate towers built up from the superstructure. On a destroyer, however, the *gun director* is housed on top of the superstructure bridge assembly. This director can usually be readily identified by the cylindrically shaped ends of the optical *range finder* extending outboard from the sides of the housing.

A *turret* is a boxlike structure of armor protecting the breech end of up to four main battery guns in a group. The turret rotates upon a *barbette*, a fixed circular tube of armor extending down to the armored deck. The barbette contains the ammunition handling rooms, hoists, and the revolving machinery for the turret. Thus the gun crews and ammunition are protected from enemy gunfire.

Gun houses (more properly *gun mounts*) are also revolving, box-shaped structures. On many small ships they are used to house the major guns; on larger ships they contain the secondary battery. Though they frequently look very much like turrets, they are not armored and their handling rooms are not protected by barbettes. The plating is intended only as a protection from light splinters and heavy seas. On a battleship or cruiser, the gun mounts are mounted along each side amidships. On destroyers, four or five gun mounts are arranged fore and aft along the centerline. Latest practice is to mount either one or two 5-inch dual-purpose guns in each mount.

A large number of guns are not mounted in turrets or gun mounts. Almost all antiaircraft guns, such as the 50-caliber, 20-mm. and 40-mm. automatics, are of this type. There is no specified location for these smaller guns; they are placed wherever they can be of the best service and wherever there is room.

Batteries. When two or more guns of the same caliber are controlled as a unit they are collectively known as a battery.

Batteries are classified as follows:

1. Main battery: the guns of the largest caliber aboard ship.
2. Secondary battery: guns smaller than those of the main battery and not designed for use primarily against aircraft. Only those ships mounting turrets have a secondary battery, and that battery may be composed of dual-purpose guns.
3. Antiaircraft battery: all guns installed primarily for use against aircraft.

Projectiles. For our purpose, projectiles may be classified either as armor-piercing or as high capacity. The former are designed to pierce heavy, face-hardened armor, and the fuse carried in the base of the projectile is so constructed that its action is delayed a fraction of a second to allow time for penetration before detonation. The high capacity shell, on the other hand, has walls only sufficiently thick to withstand the shock of firing. Since the high capacity projectiles do not have to withstand the heavy shock of impact without bursting, a more sensitive explosive may be used, and since the walls are thinner, greater space is available for it. In these projectiles, the wall is thick enough to produce destructive projectile fragments and may be fused to explode either on contact or at a predetermined time interval.

Guns on typical men-of-war. A typical battleship may have a main battery of nine 16"/50 caliber guns, a secondary battery of sixteen or twenty 5"/38 caliber guns in twin mounts, and an AA battery of perhaps 15 quadruple-mount 40-mm and possibly eighty 20-mm guns. A destroyer on the other hand would probably have 5"/38 caliber guns in the main battery, no secondary battery, and an AA battery of 20-mm and 40-mm guns.

10B3. Torpedoes. The first really successful type of torpedo was the spar torpedo used during the War Between the States. It consisted of a large bomb rigged to the end of a spar which was carried by the attacking boat and placed against the side or bottom of the target. However, the automotive torpedo in its crude form had been invented in 1860. It was this latter, with its many improvements, such as the addition of the gyroscope early in the present century to give it directional accuracy, that has developed the torpedo into one of the deadliest missiles used in modern naval warfare.

Today the torpedo is the principal armament carried by destroyers, submarines, some patrol craft, and torpedo planes.

Torpedoes are self-propelling and carry a large charge of high explosives to the target. They are driven through the water by gas and steam, or by electricity, and are controlled to run a fixed course at a constant speed and at a set depth. The destructive effect of the modern torpedo is attained through the detonation of a large high-explosive charge against, or very near, the underwater hull portions of the target ship, and is of such a degree as to produce not only exterior hull penetration but severe interior ship damage as well.

The spar torpedo of the last century bore little resemblance to the present-day



Figure 58. Mighty 16-inch guns of the U.S.S. Iowa Hammer at a distant target during preparation for a Navy strike in the Pacific.

torpedo, which is a complicated precision mechanism capable of carrying its devastating blow with great speed (up to about 40 knots) and accuracy to a distance of some seven or eight miles. Torpedoes range from 18 to 24 inches in diameter and carry up to about 1,000 pounds of TNT or other high explosive. The defense against the torpedo under all conditions has not yet been perfected.

Torpedo tube mounts on the modern destroyer are usually located amidships on the centerline. They consist of four or five tubes fitted with breech mechanisms. The mounts revolve so that the torpedoes can be launched on either side of the ship. Some old cruisers have torpedo tubes on the main deck aft, while older destroyers have them mounted on the port and starboard sides amidships.

10B4. Mines. Mines, in one form or another, are old weapons. Both contact and electric-discharge types of mines were employed with some success during the War Between the States. During World War I, a mine barrage 240 miles long, from 15 to 25 miles wide, and some 250 feet deep, was almost completed across the opening of the North Sea, between the Orkney Islands and the coast of Norway. Most of these "antenna" mines, totaling more than 70,000, were laid by the American Navy and this barrier was credited with probably seventeen submarines sunk or seriously damaged.

Mines are normally laid by ships called minelayers, especially designed for that purpose. However, they may also be planted by destroyers, submarines, patrol craft, cruisers, or as has been done in the present war, by aircraft.

Mines, like torpedoes, are a bomb-type ammunition, designed to create underwater and internal damage. However, unlike the torpedo, the mine normally remains stationary and depends upon the target to come with its range of action. The explosive used is a heavy charge of TNT contained in a light metal case that may either be anchored a few feet below the surface, kept submerged but not anchored, or planted so as to remain on the bottom. The anchored mine is the most commonly used type.

Contact mines are set off by direct contact with the hull of the ship. Sound mines are detonated by the effect of sound waves passing through the water nearby. Magnetic mines are exploded by the action of magnetic impulses sent out from the ship passing over. *Desperming* and *degaussing* are methods which have been used with some success to condition the ships' hulls so that they do not activate the detonating mechanism.

Several methods have been used to clear areas of mines. In general, moored mines are swept by sweep wires extended between several minesweepers. Magnetic mines are exploded harmlessly by producing strong magnetic fields at a safe distance from the sweeping ship. Acoustic mines are combated by intentionally creating underwater sounds of the appropriate quality.

In employment, the mine is primarily defensive, although in drifting form it may be used as an offensive weapon. One use of mines is to deny the use of a select area which the sower, knowing the safe channels, can use. They are also planted in areas that the enemy is expected to use. Under these circumstances a mine may be considered as a stationary torpedo. Mines may also be sowed



Fig. no 59. Coast Guardsmen on the Coast Guard Cutter Spencer watch the explosion of a depth charge which blasted a Nazi U-boat's hope of breaking into a large convoy.

in a drifting field in the path of an enemy force, causing it either to accept the menace of the field or to maneuver in a manner to the advantage of the fleet sowing the mines.

In April 1944 the British Air Ministry announced that at least 500 enemy vessels, totaling over 750,000 tons, were known to have been sunk or damaged over a four-year period by mines laid by British aircraft alone.

10B5. Depth charges. The depth charge is a highly specialized weapon designed to combat the submarine menace; it is carried by destroyers, destroyer escorts, subchasers, PT boats, and other vessels likely to engage submarines. It is sometimes carried by light cruisers and aircraft. Depth charges first came into use in 1916 and soon proved their effectiveness as offensive weapons against submarines, particularly when used in conjunction with hydrophones which were installed to detect the presence of submarines.

A depth charge is of the bomb-type class of ammunition. The most common type consists essentially of a heavy charge of TNT in a light, keg-shaped case which is fitted with a mechanism capable of being set to detonate the charge by action of water pressure at a chosen depth. Depth charges are launched either by rolling them from inclined racks on the fantail or by projecting them from special guns which throw them well clear of the attacking ship's sides. A large number of depth charges are dropped around the supposed location of the enemy.

This weapon has been dreaded by submarine commanders in both world wars. In addition to actual destruction of submarines which has been considerable, even unsuccessful attacks have, on occasion, seriously impaired the morale aboard these vessels. During the present war, depth charges have been made considerably more effective as the submarines themselves have become less vulnerable.

10B6. Bombs. Aircraft bombs date, of course, from the advent of aircraft and are therefore comparatively new. Bombs were used with aircraft to some extent during World War I.

Bombs vary widely in size, construction, content, and purpose. They are offensive weapons and are of a number of types, represented chiefly by armor-piercing, demolition, and incendiary. The incendiary bomb should not be confused with the armor-piercing or demolition bomb. The two latter bombs will cause fires if conditions are favorable; however, the true incendiary bomb is quite small and is loaded with material that cannot be extinguished by ordinary means once it starts to burn.

Bombs carried as a weapon by aircraft are used to inflict damage on surface ships, submarines, and land areas. Their development during recent years has been very rapid and there is no question of their effectiveness during the present war.

10B7. Rockets. Although rockets were not used in combat by our Navy until early in 1942, they are not new weapons to the military world. Indeed they were employed successfully more than 700 years ago.



Figure 60 As the first wave of assault forces against Mindoro Island nears the shore, a rocket-firing LCI lays down a powerful barrage of deadly projectiles to smother beach defenses.



Figure 61. Garbed in asbestos and wearing a gas mask, this Navy man is charged with the duty of firing the rockets from a landing craft.

In the nineteenth century, the British revived rockets as war weapons, and rocket ships were used when they attacked Fort McHenry at Baltimore late in the War of 1812. Hidden batteries sunk one of the rocket ships and forced others to retire. Their use in that engagement has been immortalized by Francis Scott Key in "The Star Spangled Banner" by the phrase, "the rockets' red glare." While success was achieved with rockets during the first half of the nineteenth century, the phenomenal improvement of artillery during the second half resulted in the abandonment of this weapon.

The Navy has made great strides in rocket warfare during the past three years. These missiles were first used operationally in the invasion of North Africa and were fired from multiple launchers on small landing craft. A 4.5-inch rocket is usually used for operations of this nature. Its warhead is thin walled, so that it not only has tremendous explosive quality but it is fragmentary and showers the surrounding area with shrapnel-like pieces of its casing. Since the North African operations, rocket-equipped landing craft have been used effectively in the invasions of Sicily, Italy, Normandy and Southern France; and in the amphibious assaults on Cape Gloucester, Kwajalein, Eniwetok, Saipan, Guam, the Palau and the Philippines. At Guam, some 10,000 were fired in less than five minutes from the tiny assault boats. In combating submarines, in attacking shipping, in slashing at enemy beach defenses to cover troop landings, in blasting shore establishments—in practically all types of offensive action rockets have been used with increasing success.

These weapons are not, by any means, intended to supplant gunfire; they merely supplement it. Their primary advantage is in their lack of recoil, which makes it possible to assemble tremendous hitting power on small craft which could not stand the shivering shock of guns of equivalent destructiveness. As simple in principle as the oldtime Fourth of July skyrockets, American rockets and launchers are artillery-like weapons. The rocket is the equivalent of a shell, plus the propellant powder charge; the launcher is the gun. Both rocket and launcher vary in length and diameter. The rockets have warheads that carry varying amounts of high explosives, or smoke-producing or incendiary chemicals. The tube that extends aft of the head contains the propellant—a material that, when electrically ignited, generates expanding gas which propels the rocket forward by pushing against the head. Some rockets have fins, either fixed or folding, to stabilize flight.

Tremendous numbers of amphibious craft are being equipped with multiple banks of rocket launchers; hundreds of naval warplanes have rocket projectiles slung under their wings. Equipped with rockets, fighter planes now have the striking power of artillery, without, of course, the weight and recoil of the heavy guns. As with landing craft, plane rockets are not intended to replace standard armament but rather to augment it. The actual success achieved by rockets and their increasing importance in this war are reflected in the action of the Navy Department in tremendously expanding their production late in 1944.

10B8. Poison gas. Poison gas has not been mentioned in this discussion,

although it was widely employed in World War I against land forces. It does not lend itself readily to naval warfare, but its possible use by a desperate enemy has not been ignored by our Navy.

10B9. Armament versus armor. The development in armor has gone along with the development of armament during the last hundred years. At times armament has been superior to armor, and at other times the reverse condition has obtained. The tendency has always been toward equality at battle ranges. The wrought-iron armor of the *Monitor*, famous in the War Between the States, could not be penetrated by the guns of the *Merrimac* at point-blank range. Further development of the gun resulted in a weapon superior to the defensive powers of the armor. The development of armor in the early '90's, which resulted in the production of face-hardened steel armor plate, again put armor ahead. This lead has been overcome by the development of the gun. During World War I, armor was repeatedly pierced at battle ranges.

Wide changes have been made in the location and distribution of armor since that time. In the earliest armored ships practically the entire ship was armored. As the penetrative power of the gun increased, armor was made thicker and thicker, and restricted in extent to a narrow belt at the waterline and on the barbettes. When armor again got the upper hand the armored area was increased, the waterline from stem to stern being armored with a heavy belt, and lighter armor used to protect the secondary battery. Recent practice is to have a heavy belt, extending vertically from about nine feet below the waterline to about a deck height above it, and extending longitudinally between the armored bulkheads which run from the side of the ship to the end barbettes; besides armor on the conning tower, barbettes, turrets, steering engine room, and uptakes. In addition to the side armor, deck armor has been developed. This was caused by the increase in battle ranges, resulting in more nearly vertical angles of fall for the projectiles, and aircraft attack.

C. GROUND TACKLE

10C1. Definition. Ground tackle is a name given to the articles of equipment, considered collectively, used in connection with anchoring and mooring. When one anchor is used to secure a vessel it is said to be *anchored*. The term *moor* is used when a vessel is made fast to a mooring buoy, when it is swinging on a bight of a chain between two anchors in line, or when it is secured alongside a dock or another ship. The first lieutenant is responsible for the condition of the ground tackle on board ship and he keeps a complete log of the history of every piece of this important equipment.

10C2. Anchors and anchor chain. Anchors vary in weight from 30 pounds to about 30,000 pounds. Most ships carry two main anchors forward, the *starboard bower* and the *port bower*, though large ships may have in addition a *stem anchor*.

The *hawse pipes* are the tubes leading the anchor chain from the deck on which the windlass is located down and forward through the vessel's bow plat-

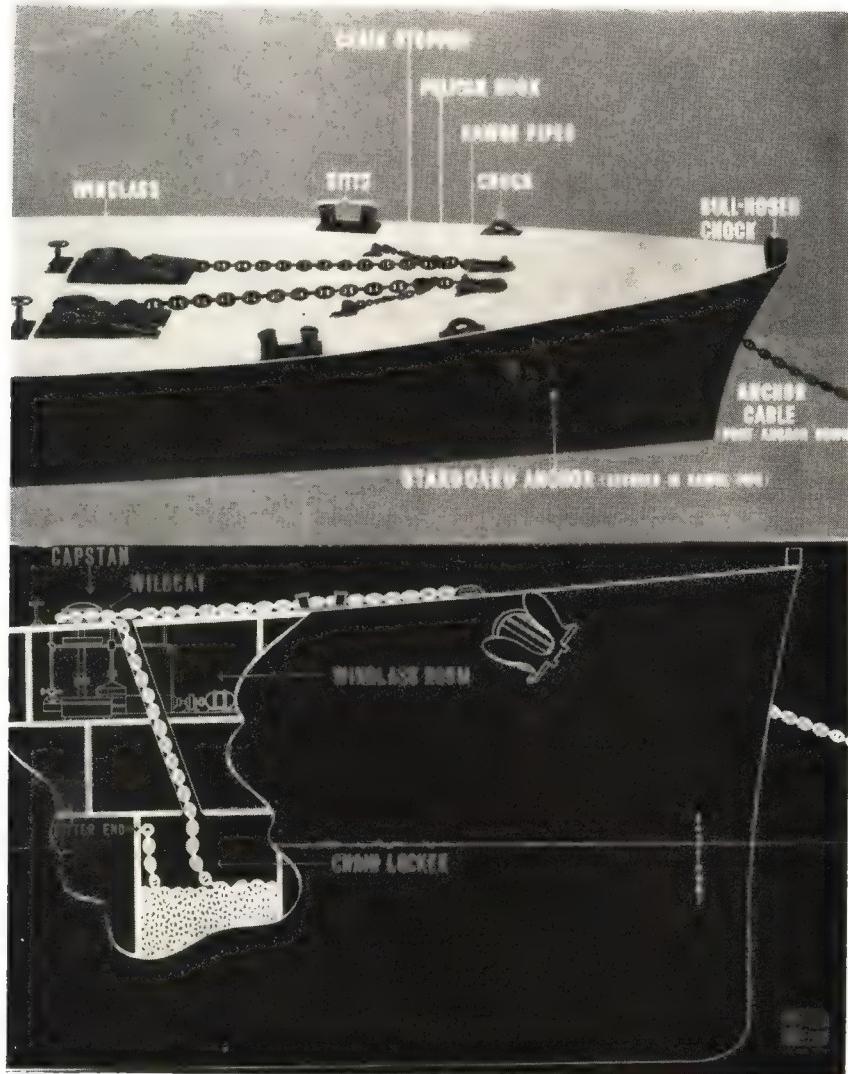


Figure 62. Outline pictures showing the nature and use of ground tackle gear on a modern ship.

ing. These openings are just abaft the stem on both sides of the ship. When a ship is underway or tied up to a pier the anchors are "housed" with their shanks in the hawse pipes and their *flukes* outside. The anchor chain runs freely through the hawse pipe when the anchor is "let go."

Anchor chain and anchors are taken in by means of an anchor *windlass*. This consists of an engine, either steam or electric, which turns a shaft on which is mounted a *wildcat* or *chain grab*. The wildcat is a concave, drumlike contrivance with ridges around it, and these ridges are so shaped that they engage

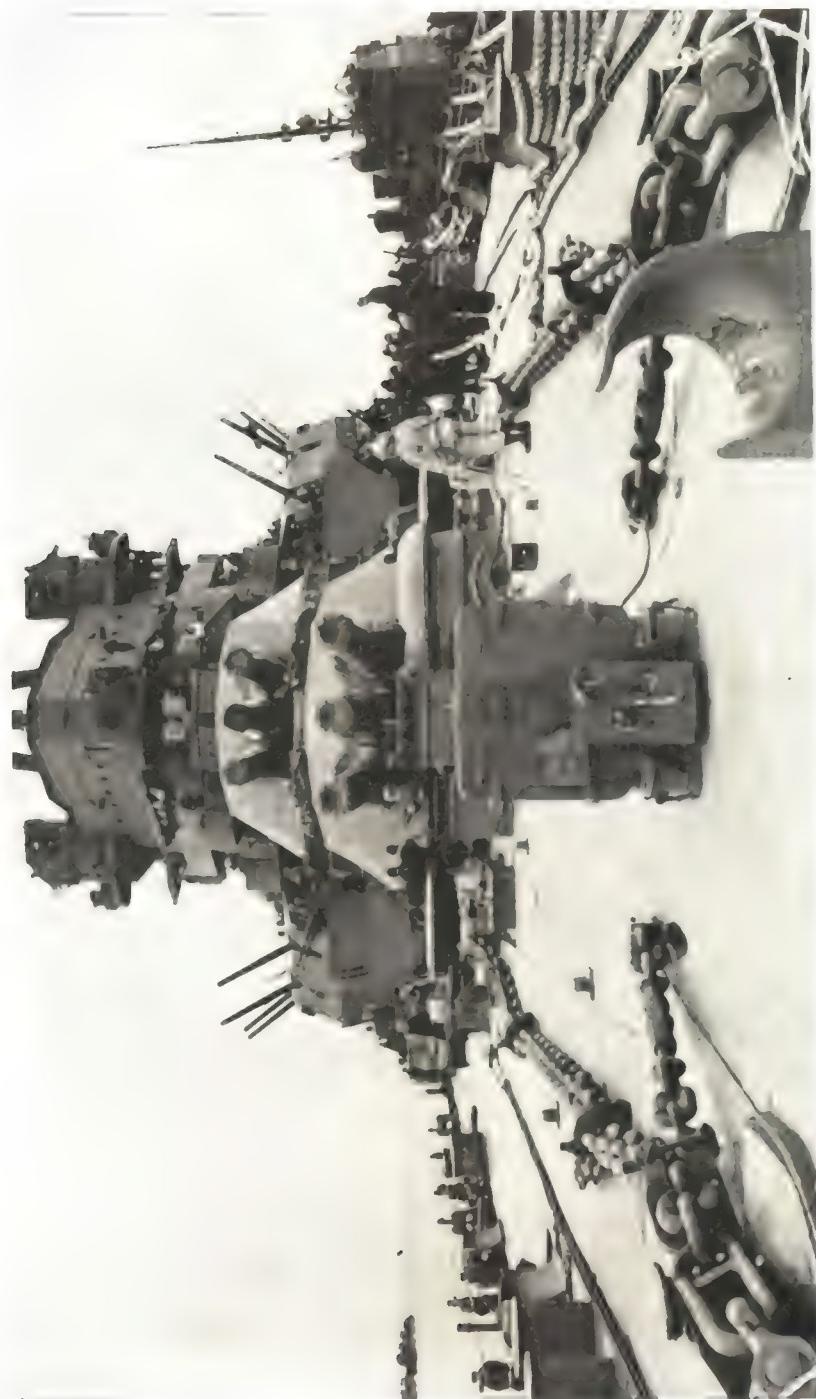


Figure 63. Forecastle of a battleship showing ground tackle.

the links of the anchor chain. The wildcat is secured to the shaft for heaving the chain or paying out small amounts, but is disconnected in dropping the anchor. When the ship is riding at anchor the wildcat is disconnected from the shaft and the brake is set taut. The anchor chain is secured on deck by a short length of chain called a *chain stopper* which is made fast to a permanent pad eye on the forecastle. The chain stopper is fitted with a slip hook, called a *pelican hook* for quick releasing of the anchor and chain. The chain passes from the wildcat down into the *chain locker* where it is stowed.

Wire ropes or manila *hawsers* are employed when a vessel is moored alongside a pier. On the ship these lines are secured to pairs of vertical metal heads called *bitts* and pass over the ship's side through metal *chocks*. They are secured on the pier to vertical posts called *bollards*.

Smaller lines may be secured to *cleats*, which are fittings of wood or metal with horns and are located in various appropriate places on board ship. The concave barrel-like portion of the windlass is called a *capstan* or *gypsy* and is used for handling anchor chains and hawsers.

D. BRIDGE ASSEMBLY

10D1. Introductory. Well forward on destroyers and nearly amidships on our new battleships is a high prominent structure which consists of deckhouses, platforms, ladders, and spaces for enclosing gun, ship and fire control equipment. A major part of this assembly on all ships is the *bridge*. The bridge is the main control point and "nerve center" for the whole ship. All orders and commands come from the bridge while the ship is underway. It is the duty station of the Captain and the officer of the deck. The latter at sea has an organization of considerable size to assist him in performing his duty and to feed information into this focal center. Telephonic or voice-tube communication enables him to keep in touch with all parts of the ship from his post.

10D2. Bridge equipment. A list of the equipment to be found on the bridge of a modern warship would include: the *wheel* for steering the ship; the *binnacle*, a stand housing the magnetic compass; a *gyro-repeater* operated by the gyro-compass; the *engine order telegraph* or *annunciator* for transmitting orders to the engineers; a *fathometer* for measuring the depth of the water by sound waves; a *radio direction finder*; *switchboards* for operating lights and alarms; and devices for tracking submarines and surface craft. Navigational equipment such as sextants, charts, drawing instruments, and reference books may be stowed on the bridge; but more often it is kept in a separate compartment nearby, called the *chart house*. Around the enclosed bridge there is usually an open platform where lookouts and the officer in charge may determine the position of other ships, lighthouses, buoys, etc.

10D3. Conning tower. On battleships and cruisers there is a heavily armored structure called the conning tower which contains duplicates of all the control apparatus found on the bridge. It is located just forward of and slightly below the bridge and being the primary ship control station during action is



Figure 64. The extensive equipment necessary to operate a modern warship is shown in part in this picture of the wheelhouse of the U.S.S. *Albemarle*.

the battle station of the Captain. Some ships have, in addition, a *battle bridge*, which is an open platform nearby the conning tower for the use of the Commanding Officer during engagements in which aircraft are employed.

10D4. Fire control tower. Battleships and cruisers also have a fire control tower, which is either a separate structure just aft of the conning tower or actually an integral part of that structure. It is the battle station of the gunnery officer and contains equipment for the control of gunfire.

10D5. Signal bridge. The signal bridge is an open platform located near the navigating bridge and it is from this point that signalmen maintain visual communication with other ships and stations in the vicinity. Also normally located in the bridge assembly is the radio room which is usually soundproofed.

E. MASTS, STAFFS, and STACKS

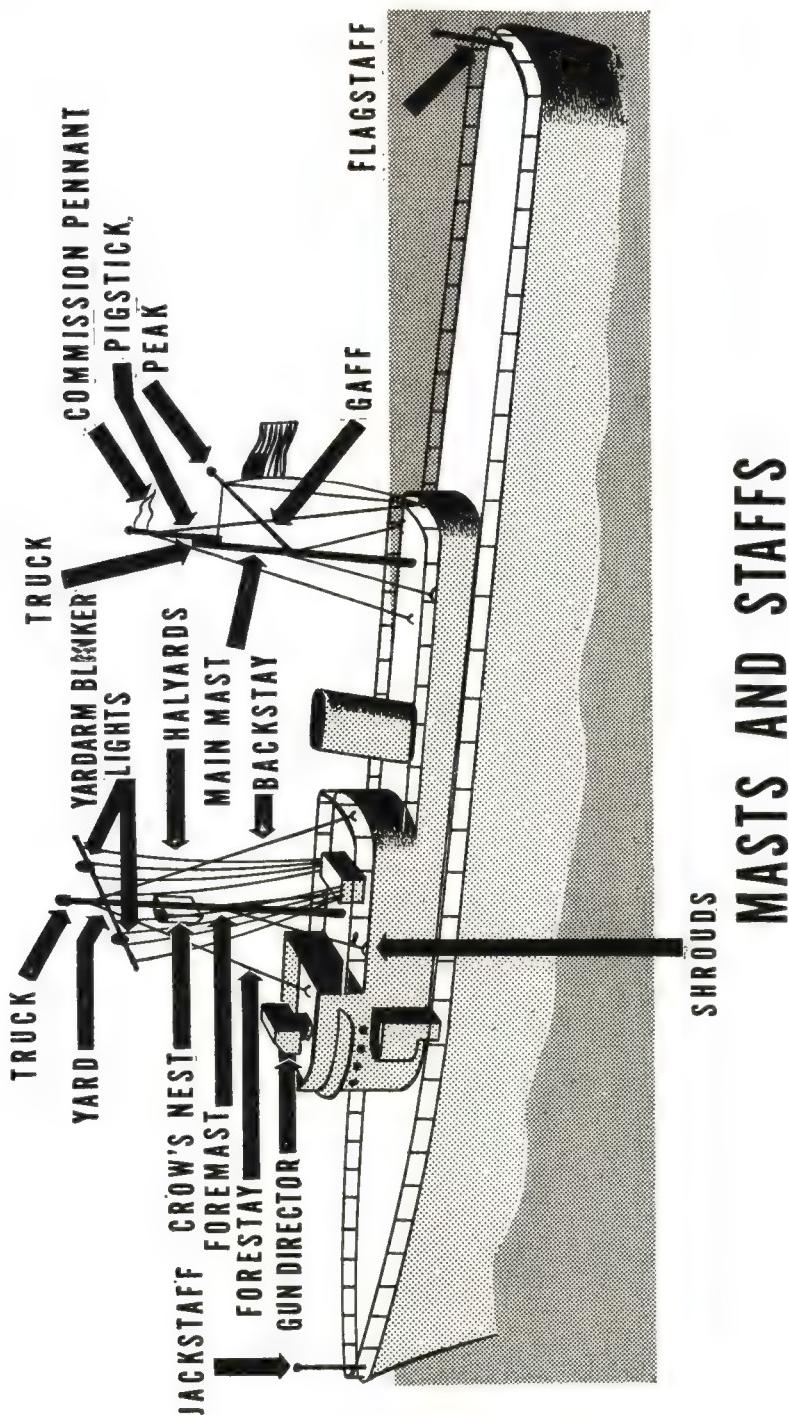
10E1. Masts. Navy ships have either one or two masts. If there are two, the mast placed farther forward is called the *foremast* and the other the *mainmast*. On single-masted ships the mast is well forward of amidships, is usually part of the superstructure bridge assembly, and is referred to as the foremast or simply as the mast. Nautically the word "mast" is pronounced "mist" when coupled with another word; thus "foremast" is pronounced "foremist."

Masts may be of many sizes and shapes, some being built up of heavy structural steel and others simply a metal or wooden pole. On the larger ships a heavy mast may support an upper structure called the *foretop* or *maintop*, which houses gun directors, range finders, and other equipment for the control of gunfire. On ships of all sizes, at least one mast, together with a spar running athwartships called a *yard*, will support signaling devices rigged in such a position that they will be clearly visible from other ships. Rigidity of position of the lighter type of mast is obtained by *standing rigging* consisting of wire rope *stays* running in afore-and-aft direction and *shrouds* running athwartships down to the bulwarks.

The mast tops of all important combatant units are fitted with a platform on which is installed one or more radar antennas. The masts also support radio antennas. Almost every naval vessel has a pigstick on the mainmast, from which the *commission pennant* or an officer's *personal flag* is flown. Extending abaft the mainmast of a naval vessel is a small spar known as the *gaff*. From the top or peak of the gaff the national ensign is normally flown when the ship is underway.

10E2. Staffs. The small vertical spars at the bow and stern of a ship are the *jackstaff* and *flagstaff* respectively. When a naval vessel is at anchor or moored, it flies the union jack on the jackstaff and the national ensign on the flagstaff from 0800 to sunset.

10E3. Stacks. The stacks on board ship are pipes employed to expel smoke and gases from the boilers. Most naval vessels have their stacks on the centerline approximately amidships. The notable exception to this is the aircraft carrier whose stacks are located on the "island" at one side of the flight deck or



protrude from the sides of the ship. A discussion of both masts and stacks and their part in ship identification may be found in chapter 8.

F. SIGNALING DEVICES AND LIGHTS

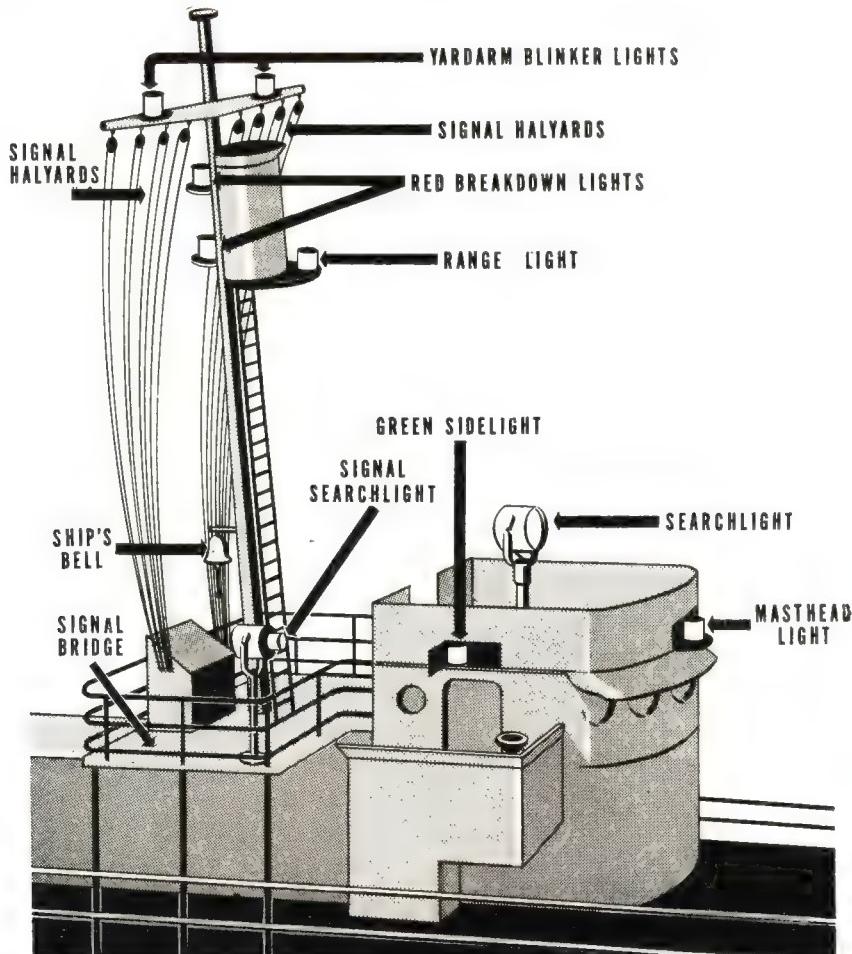
10F1. Types of signaling devices. The various signaling devices carried aboard ship are used for protection and transmitting messages.

Most of the equipment for short-range signaling is located on or near the signal bridge. The *signal flags* are bent on to *halyards* or light lines and hoisted to the yard. When not in use, these flags are carefully stowed in a *flagbag* (see Fig. 100), a device in which the flags are arranged alphabetically and numerically. *Signal searchlights* are also located on or near the signal bridge. The searchlights have manually operated shutters and are used to transmit messages in code by alternately flashing and obscuring the light. The dot is represented by a short flash and the dash by a long flash, three times as long as that of the dot. The pause between the elements of a letter is a period of no light lasting as long as the flash representing the dot. The *yardarm blinkers* are two electrically-operated lights on the ends of the yardarm. They are controlled by a key on the signal bridge or other signal station. The blinkers, because of their high location are visible over a radius of 360 degrees and thus may give a signal to several ships in formation. The searchlight, on the other hand, generally directs its light at a single ship or spot on shore. The *semaphore* system of signals is useful only in daytime. It was formerly used at night with a machine having movable illuminated arms, but this device was considered superfluous compared to the efficiency of flashing light. The system uses a semaphore alphabet, the characters of which are formed by changing the positions of the arms. The arm positions alone give the message but flags held in the hands give a greater range of visibility. Semaphore is used at sea between ships in formation. In port it is used for daytime administrative signaling between ships within semaphore signaling distance of each other.

The *ship's bell*, which is usually secured to the mast above the signal bridge, is sounded when the ship is at anchor in a fog, mist, falling snow, or heavy rainstorm, either in daytime or at night. The Rules of the Road (which may be found at the back of *Navy Regulations*) require that it be rung rapidly for about five seconds at intervals of not more than a minute. If other men-of-war are present or expected it is customary to strike the ship's call numerals each time the bell is rung.

The ship's bell is often tolled just as divine services begin. This is preceded by church call on the bugle. At about the same time the word is passed: "The smoking lamp is out. Keep silence about the deck. Divine service is about to begin." Today with the public address system, the announcement can be easily carried to every corner of the ship.

The *whistle* or siren is used in fog and wherever required by Rules of the Road and Pilot Rules whenever there is danger of collision due to meeting and passing, overtaking, misunderstanding of other ship's intention, etc.



SIGNAL DEVICES AND RUNNING LIGHTS

Figure 66.

Other signaling devices carried aboard ship and used when required are the flare-up lights, lantern, black balls, and pyrotechnics.

In the early days of the Navy seamen relayed messages to other ships or shore establishments by means of flags, swinging lanterns, whistles, or bells, but the range was limited to the area within sight and sound of the ship. Since that time, the electric light, radio, telephone, and telegraph have revolutionized methods of communications and thus have affected immeasurably our methods of naval warfare. With the increase in the scope and power of communications, the importance of communications has grown tremendously.

Ships in mid-ocean can now communicate with other ships or land bases thou-

sands of miles away and keep constant check on the progress of the battle and the position of the enemy. Radio, with its vast scope, has made this possible. It has, however, its limitations. During battle, breaking radio silence gives the enemy its best clue as to our position. When radio is used, codes and ciphers are often employed and the maintenance of radio and cryptographic security becomes of major importance.

Underwater sound apparatus is also classed as communication equipment. By the use of sound apparatus, a ship may obtain the approximate range and bearing of surface ships and underwater craft in the vicinity.

10F2. Lights required by Rules of the Road. The lights required by the Rules of the Road vary with types of ships, the situations which a ship may encounter, and the operation in which she may be engaged. These lights, used in various combinations of position and color, convey a definite message to ships in the vicinity and it is essential that an officer be thoroughly familiar with their usage before the need arises for employing them. For orientation purposes, a detailed description of the lights and their meanings is not necessary. However, a general discussion of the lights, their location, and some of the situations where they are used will give an indication of their importance in protecting ships and their personnel.

High up on the mast are two red lights known as the *breakdown lights*. These are turned on at night when a breakdown endangers nearby ships. *Running lights* are of three types: (1) A *masthead light* is a fixed light usually located on the upper part of the bridge superstructure or on a small shelf extending forward from the foremast. The masthead light is a bright white light which is required by the Rules of the Road to be carried by all steam vessels underway. (2) The *range light* is also a bright white light. Its position is abaft and above the masthead light, and it may be either on the foremast or the mainmast. When used in conjunction with (1) above, the combination is termed the range lights. (3) A green *sidelight* is carried on the starboard side and a red on the port side.

Towing lights and *anchor lights* are also used when the situation requires them.

G. BOATS, LIFE FLOATS, and FLOATER NETS

10G1. General. In peacetime, naval vessels carry a number of small boats. These are either suspended along the side of the ship from *davits* or "nested" one inside another on deck in a position to be hoisted over the side by boat cranes. During wartime the number of wooden boats carried is drastically reduced for they create a fire and splinter hazard in action. The few boats that are carried today are used to transport personnel and supplies when the ship is in port and they serve as life boats at sea. Many life floats and floater nets are now in evidence on ships. They are secured so that they may be released quickly by hand although they are also equipped with a hydrostatic release.

Combatant type ships, fleet auxiliaries not carrying passengers, and district



Figure 67. The type of life float found on many Navy ships today.

craft today carry boats sufficient for necessary work; they also carry life floats, floater nets, or other approved buoyant apparatus sufficient for the full complement, subject to satisfactory stowage and weight.

10G2. Abandon ship equipment. A number of items are included in the abandon ship equipment for *floats* and *floater nets*. Water is carried in wooden breakers and a graduated cup is furnished for rationing water. Also in the equipment are emergency food rations, although food is not so important as water. A fishing kit consists of hooks, lines, lures, spear, bait and a net. The flesh of fish can be squeezed to provide drinking fluid. There is a signaling mirror for attracting attention during the day and a Very pistol and cartridges for signaling at night. There are paddles for propulsion and painters for towing purposes. Also furnished is canvas paulin for protection against the rays of the sun. First-aid kit is an important item. *Life boats* in addition carry even more equipment for signaling such as yellow bunting, a flashlight and fluorescein dye which makes a bright yellow spot on the water, visible to airplanes from long distances.

11

THE NAVY ASHORE

A. BACKGROUND

11A1. Organization and growth. The present organization of the United States Navy is the result of a continuous orderly growth. When the country was young, the Navy was small, and it was a comparatively simple thing to provide for its maintenance. Ships were constructed according to general designs that were centuries old and ordnance was extremely primitive.

As technical advances occurred, and as the race for naval supremacy progressed, the Navy Department gradually expanded until it assumed its present system of organization. To trace the history of the Department would make a long story, but a few outstanding events will illustrate its process of evolution.

For the greater period of the time between the Revolutionary War and 1798 control of the Navy was exercised by Congress through its Marine Committee, but for a short time during the latter part of this period the Secretary of War exercised control of both the Army and Navy. The Constitution (1789) provides that the Congress should have the power "to provide and maintain a Navy" and "to make rules for the government and regulation of the land and naval forces"; and establishes the President as Commander-in-Chief of the Army and Navy.

In 1798, the Congress established the Department of the Navy with the Secretary of the Navy as its head.

From 1815 to 1842 a board of three Navy Commissioners aided the Secretary in the administration of the Department. In 1842 the bureaus were established by statute which provided that the business of the Department should be distributed in such manner as the Secretary of the Navy should judge to be expedient and proper among them. The original bureaus set up in 1842 were the Bureau of Navy Yards and Docks; the Bureau of Construction, Equipment, and Repair; the Bureau of Provisions and Clothing; the Bureau of Ordnance and Hydrography; and the Bureau of Medicine and Surgery.

The Office of the Assistant Secretary of the Navy was established for a temporary period from 1861 to 1869, and was reestablished in 1890.

In 1915 the Congress provided for the Office of Naval Operations, headed by a Chief of Naval Operations, who was to be charged, under the direction of the Secretary of the Navy, with the operation of the Fleet and with the preparation and readiness of the plans for its use in war.



Figure 68. An extremely active center of the Navy's wartime program is the Navy Department building which faces on historic Constitution Avenue in the heart of the Nation's Capital.

In 1921 Congress set up a separate Bureau of Aeronautics, and several years later (1926) provided for an Assistant Secretary of the Navy for Air.

By statute enacted in 1940, the Office of the Under Secretary of the Navy was authorized during any national emergency; the Under Secretary of the Navy is to perform such duties as may be prescribed by the Secretary and is next in succession to the Secretary during his absence or disability.

It is the purpose of the Department to supervise and maintain a naval establishment in readiness for the performance of such duties as the President, who is Commander in Chief, may order. The fundamental naval policy of the United States is to maintain the Navy in sufficient strength to support the national policies and commerce and to guard the continental and overseas possessions of the United States.

In addition to the seven bureaus, Marine Corps Headquarters, and Coast Guard Headquarters, the organization of the Navy Department includes the Office of the Chief of Naval Operations and the Executive Office of the Secretary (the latter consisting of a number of boards, offices, and committees reporting to the Secretary and his immediate staff). The principal offices of the Commander in Chief, United States Fleet, are located in the Navy Department.

B. GENERAL ORGANIZATION OF THE NAVY DEPARTMENT

11B1. The Secretary of the Navy. The Secretary of the Navy is responsible to the President for the general supervision and direction of all naval affairs and activities, including those relating to the procurement of naval stores and materials, and the construction, armament, equipment, and improvement of vessels of war, as well as those relating to the naval establishment. He is responsible for the distribution of the business of the Department among the bureaus and has immediate supervision of certain activities of the Executive Office of the Secretary. Such activities over which he has immediate supervision include the General Board of the Navy, the Joint Army-Navy Board, the Office of Budget and Reports, the Office of Fiscal Director, and the Office of Public Relations.

11B2. Under Secretary of the Navy. The Under Secretary of the Navy has the immediate supervision and direction of all matters relating to naval and civilian personnel and the general administration of the Department of the Navy, including the general administrative control of shore establishments. In addition, he has direct supervision of Naval Petroleum Reserves.

11B3. Assistant Secretary of the Navy. The Assistant Secretary of the Navy has immediate supervision and direction of all matters relating to material, including the development, production, procurement and disposition of material. Among the matters under his direct supervision are those relating to naval research and development, and patents and inventions, as well as labor relations of private contractors.

11B4. The Assistant Secretary of the Navy for Air. The Assistant Secretary of the Navy for Air is charged with the supervision of naval aeronautics and the coordination of its activities with other governmental agencies.

11B5. The Chief of Procurement and Material. The Chief of Procurement and Material, under the direction of the Assistant Secretary, is charged with the coordination of all the material procurement activities of the Navy Department and the supervision of programs, the procurement of ships and materials of every character.

11B6. The Office of General Counsel. The Office of General Counsel is under the direct supervision of the Assistant Secretary of the Navy and is responsible for all legal advice and services relating to procurement or disposition of material and facilities and such other legal duties as may be assigned. It is divided into a central coordinating office, offices of counsel for each of the several bureaus, and it furnishes counsel for the several activities of the Office of Procurement and Material.

11B7. Office of the Judge Advocate General of the Navy. The Judge Advocate General of the Navy has cognizance of all matters of law, other than legal matters affecting procurement, arising in the Navy Department and performs such other duties relating thereto as may be assigned to him by the Secretary of the Navy.

The Office of the Judge Advocate General has cognizance of all matters of law which involve the service, and reports upon the legal features of courts-martial, courts of inquiry, and boards of investigation and inquest. It also drafts proposed legislation arising in the Department. It renders to the Secretary opinions on the legality of any matters referred to the Office by him, including proceedings in the civil courts by or against the Government—action relating to insurance, contracts, copyrights, and trade marks.

The Judge Advocate General prepares for submission to the Attorney General such questions as the Secretary of the Navy may direct. This office examines reports, bills, and resolutions introduced into Congress and referred to the Navy Department. Additional functions include the review and necessary action on international law, admiralty cases, and claims for damages involving vessels and aircraft.

11B8. General Board. The General Board was first created in 1900 by executive order under the presidency of the Admiral of the Navy. It was charged with formulating a general naval policy and with advising the Secretary. This was the real beginning of attempts to plan a long-range naval policy for the United States.

The General Board, acting in an advisory capacity, considers and reports upon such subjects as the Secretary of the Navy may direct. The General Board considers the United States Naval Policy, that is, the system of principles, the general terms of their application, governing the development, organization, maintenance, training, and operation of a navy. It recommends to the Secretary of the Navy the number and types of ships for the Fleet, and considers the number of naval districts, yards, stations, operating bases, and other shore activities; and advises the Secretary of the Navy respecting the general policy to be adopted toward them.

The membership of the General Board is designated by the Secretary and usually consists of from five to eight of the highest ranking officers. The Board conducts hearings for the purpose of obtaining from competent witnesses information useful in establishing its recommendations. Reports and recommendations are submitted directly to the Secretary but for his information only. There are no articles of law which require the Secretary to accept or act upon any recommendation of the General Board.

11B9. Joint Army-Navy Boards. Several joint boards have been created for the purpose of assuring closer cooperation between the armed services. Among them are the Joint Army-Navy Board, the Joint Army-Navy Munitions Board, and the Joint Economy Board. These boards were not created by law, and their achievements rest solely upon the cooperative spirit manifested between the departments.

Joint Chiefs of Staff. The Joint Chiefs of Staff, while not actually a joint Army-Navy Board, consult together, under the direction of the President, on matters of joint concern to the armed forces; advise the President as to their use; and take appropriate action to implement his plans and policies as Commander in Chief of the Army and Navy.

11B10. Combined Chiefs of Staff. The Combined Chiefs of Staff consists of the members of the United States Joint Chiefs of Staff mentioned above plus four representatives of the British Chiefs of Staff. Meetings of the Combined Chiefs of Staff integrate the plans and operations of that part of the United Nations armed forces which lie within the cognizance of United States and Great Britain into the broad scheme of the grand strategy of the United Nations in this truly global war.

11B11. Commander in Chief, United States Fleet, and Chief of Naval Operations. The duties of the Commander in Chief, United States Fleet, and Chief of Naval Operations have been combined in accordance with Executive Order 9096 of 12 March 1942. They devolve upon an admiral who is the principal naval adviser to the President on the conduct of the war, and the principal naval adviser and executive to the Secretary of the Navy on the conduct of the activities of the Naval Establishment.

A line officer on the active list, with the rank of vice admiral, is detailed as Deputy Commander in Chief, United States Fleet, and Deputy Chief of Naval Operations to act for and in the name of the Commander in Chief, United States Fleet, and Chief of Naval Operations, in such matters (chiefly policy-making) as the latter may direct.

The Commander in Chief, United States Fleet, and Chief of Naval Operations is a member of the Combined Chiefs of Staff—United States and Great Britain, and is the senior Navy member of the Joint Army-Navy Board.

During the temporary absence of the Secretary of the Navy, the Under Secretary of the Navy, and the Assistant Secretaries of the Navy, the Commander in Chief, United States Fleet, and Chief of Naval Operations is next in succession to act as Secretary of the Navy. In the temporary absence of all of these officers,



Figure 69. The Combined Chiefs of Staff meet in Washington in one of their frequent conferences to coordinate and further the war effort of the United Nations.

the Vice Chief of Naval Operations and the Chief of Staff, United States Fleet, respectively, is next in succession to act as Secretary of the Navy.

The Commander in Chief, United States Fleet, has supreme command of the operating forces comprising the several fleets, seagoing forces, and sea frontier forces of the United States Navy, and is directly responsible, under the general direction of the Secretary of the Navy, to the President therefor. The Office of the Chief of Naval Operations is composed of seventeen divisions. The organization of the Office of Commander in Chief, United States Fleet, and Chief of Naval Operations is changed from time to time to meet changing situations.

C. THE BUREAUS OF THE NAVY DEPARTMENT

11C1. General. The bureaus of the Navy Department are under the direct control of the Secretary, who has delegated to the Under Secretary the supervision over the procurement activities of the bureaus. The Bureaus of Ships, Ordnance, Yards and Docks, and Aeronautics, which are sometimes referred to as the material bureaus, perform primarily procurement functions. The Bureau of Supplies and Accounts also performs certain procurement functions, and in addition performs disbursing and accounting functions for the entire Navy. The Bureaus of Naval Personnel and Medicine and Surgery render services to the Naval Establishment as a whole. The Headquarters of the Marine Corps and the Headquarters of the Coast Guard are also organized to provide special services for certain segments of the Naval Establishment.

Each of the seven bureaus is headed by a Chief of Bureau and an Assistant Chief of Bureau, who serves as the Chief in the absence of the Chief of the Bureau. These officers normally hold the rank of Rear Admiral. The bureaus are organized into divisions and sections according to the functions performed.

11C2. Bureau of Ships (BuShips). The increase in size and complexity of naval vessels necessitated such close coordination of the Bureau of Construction and Repair and the Bureau of Engineering that in June 1940, the functions of these Bureaus were consolidated and transferred to the newly created Bureau of Ships.

The general design, structural strength, stability, and seaworthiness of all ships of the Navy, and the maintenance, repair, alteration, modernization or conversion of hull and machinery, including its related equipment used for propulsion of naval vessels, district craft (except for those of the Bureau of Yards and Docks), and small boats, are functions of this Bureau.

It has cognizance of auxiliary machinery, including pumps, distilling, refrigeration and ventilating apparatus, heating and piping systems. The generation and distribution of electric power on board ships, interior communication systems, radar, radio and sound equipage, electrical methods of internal and external signaling, diving gear, experimental diving units, respiratory apparatus, and mine-sweeping gear are also the responsibilities of this Bureau.

To keep abreast of the rapid stride in scientific development, the Bureau

maintains experimental laboratories, including the Naval Research Laboratory, David Taylor Model Basin, Naval Engineering Experiment Station, Naval Turbine and Boiler Laboratory, Naval Materials Testing Laboratories, and laboratories at navy yards. In the latter, paints, rubber products, rope, chain and other materials are tested and developed.

The Naval Research Laboratory was established at Anacostia, Washington, D.C., in 1923. It was the late Thomas A. Edison, as head of the Naval Consulting Board during World War I, who vigorously supported the idea of establishing a laboratory devoted exclusively to naval research. In this institution there are divisions specializing in electronics, sound, mechanics and electricity, physical optics, chemistry, physics, metallurgy, and communications. The Laboratory made an important contribution to science when it discovered certain phenomena that led to the development of radar.

The David Taylor Model Basin, originally established in 1898 at the Washington Navy Yard, is now located at Carderock, Maryland. The father and guiding genius of the Model Basin, which is the finest plant of its kind in the world, was the late Rear Admiral David W. Taylor. It was established primarily to determine the best underwater forms for the hulls of ships, but from the beginning it carried on a great deal of contributory research on hydrodynamics, ship construction, and ship propulsion. Some of the work done at the Model Basin in its early days is classic in the fields of naval architecture and marine propulsion. Here on a miniature ocean, new inventions, improvements, and tactics are tested before being used in actual conflict. Models are given a thorough testing and the plans are then revised in accordance with these tests in order that the completed ship will give the most satisfactory performance. With the advent of the airplane, the Model Basin undertook the construction and operation of the first wind tunnel in the United States for studying the aerodynamics of flight.

11C3. The Bureau of Ordnance (BuOrd). The Bureau of Ordnance, under the direction of the Secretary of the Navy, is charged with and responsible for the design, manufacture, procurement, maintenance, issue, and efficiency of all offensive and defensive arms and armament (including armor, torpedoes, mines, depth charges, pyrotechnics, bombs, ammunition, war explosives, war chemicals; and defensive nets, booms, and buoys, plus anchors, moorings, and appliances therefor except fixtures on shore used to secure the ends of nets and booms), and, except as specifically assigned to other cognizance, optical and other devices and material for the control of guns, torpedoes, and bombs.

It is charged with the upkeep and operation of the following naval ordnance establishments and with their repair, within the capacity of the force employed: naval gun factories, naval ordnance plants, naval torpedo stations, naval proving grounds, naval powder factories, naval ammunition depots, naval magazines on shore, naval mine depots, naval net depots, naval ordnance test stations, naval mine warfare test stations, naval ordnance laboratories, naval torpedo testing ranges, naval degaussing, and naval deperming stations.



Figure 70. Navy's David Taylor Model Basin at Carderock, Maryland.

11C4. The Bureau of Yards and Docks (BuDocks). The duties of this Bureau comprise all that relates to the design and construction of public works and public utilities of the Naval Shore Establishment, and during the war period it supervises the construction of private plant facilities and extensions financed with naval funds. The scope of its functions includes structures and improvements located within the United States, in Alaska, various island possessions, in Panama, British Islands in the Atlantic, and temporary advance bases throughout the world.

Its work embraces such major engineering categories as drydocks, both graving and floating, marine railways, shipbuilding ways, harbor works, quay walls, piers, wharves, landings, dredging operations, floating and stationary cranes, power plants, fuel plants, fleet facilities, shops and industrial buildings, turret and erection shops, machine and electric shops, foundries, structural shops, assembly and repair shops for aircraft. It also embraces naval supply depots, administration buildings, barracks and quarters, naval hospitals and dispensaries, refrigerating plants, ammunition storage plants, torpedo plants, Marine Barracks, fuel storage plants and distribution, naval powder factories, heavier- and lighter-than-air facilities for aviation, aircraft overhaul and assembly plants, landing fields, radio stations, sewage disposal plants and distribution systems for heating, lighting, power, telephone, water, sewer and railroads, roads, water supply and sanitation, etc.

The Bureau is charged with the maintenance and upkeep of the Naval Shore Establishment where such responsibility is not assigned by law to some other Bureau. It is responsible for annual inspections and all major repairs of public works and public utilities; it designs and constructs all naval public works and public utilities after consulting as to their operating features with the bureau or office concerned.

The Bureau's responsibilities include the training, assignment, and work of the Navy Construction Battalions known as "Seabees." It is responsible for the design, procurement, and assembly at ports of debarkation of all equipment necessary for the operations of Navy Construction Battalions at advance bases.

The Bureau has charge of the operation of power plants, transportation facilities, and weight-handling equipment at all activities maintained under its cognizance. It acquires real estate for the Navy and leased for naval purposes, and has custody of real estate not in active use.

11C5. The Bureau of Naval Personnel (BuPers). This Bureau today specializes in personnel functions and was established in 1862 as the Bureau of Navigation. Originally its duties were entirely scientific, for its responsibility was the supervision of the Hydrographic Office and the Naval Observatory. Personnel matters, at this time, were handled by the Secretary's office. The Bureau of Navigation was given its first personnel assignment in 1864 when all matters pertaining to naval apprentices were transferred from the Secretary's office to this Bureau. The following year the detailing of officers was given to the Bureau of Navigation and twenty years later enlisted personnel functions were

also transferred here. The trend throughout the years has been to assign all personnel functions to this Bureau and to remove from it all matters not related to personnel. The name, "Bureau of Navigation," which had become a misnomer was changed by act of Congress in May 1942 to Bureau of Naval Personnel.

The Bureau of Naval Personnel maintains records of officers and enlisted personnel of the Navy and Naval Reserve. It determines the naval personnel requirements, fills vacancies as they occur on board ships and at shore stations, and effects transfers of duty.

The procurement of officers and the recruiting and induction of enlisted men are specific functions of this Bureau. The Recruiting Service, Induction Centers, Offices of Naval Officer Procurement, and Naval Aviation Cadet Selection Boards are under its cognizance.

The training, promotion, advancement, discipline, and discharge of personnel of the Navy are under its supervision. (The professional education of officers, nurses, and enlisted personnel in the medical department, however, is under the Bureau of Medicine and Surgery.) The Bureau is also responsible for the welfare and recreation of naval personnel, and for their transportation in the United States.

It is also charged with the upkeep, operation, and repair of the training stations where recruits are given their first instruction, of schools for the training of enlisted men, of the Naval Home, Naval Academy, Naval War College, and Post Graduate School, and with the direction of receiving ships and stations.

The Bureau of Naval Personnel is responsible for the preparation, revision, and enforcement of all regulations governing uniforms and with the enforcement of regulations and instructions regarding naval ceremonies and etiquette.

11C6. The Bureau of Medicine and Surgery (BuMed.) The Bureau of Medicine and Surgery (headed by the Surgeon-General) is composed of appropriate administrative and professional divisions and is responsible for the maintenance of the health of the Navy (including Marine Corps), the care of its sick and injured, and the professional education and training of the officers, nurses, and men of the Medical Department. The bureau maintains health records of all officers and enlisted personnel of the Navy.

The Bureau of Medicine and Surgery provides for the physical examination of officers, nurses, and enlisted personnel of the Navy and Marine Corps with a view to the selection or retention of only those whose physical condition is such as to maintain or improve the military efficiency of the service.

The Bureau of Medicine and Surgery is charged with the management and control of all naval hospitals; naval dispensaries located at all naval stations; medical supply depots; issuing medical storehouses; naval base and fleet hospitals; medical laboratories; the National Naval Medical Center; and of all technical schools established for the education or training of members of the Medical Corps, Hospital Corps, Dental Corps, and Nurse Corps, and has supervision of the V-12 Medical and Dental Training Program.

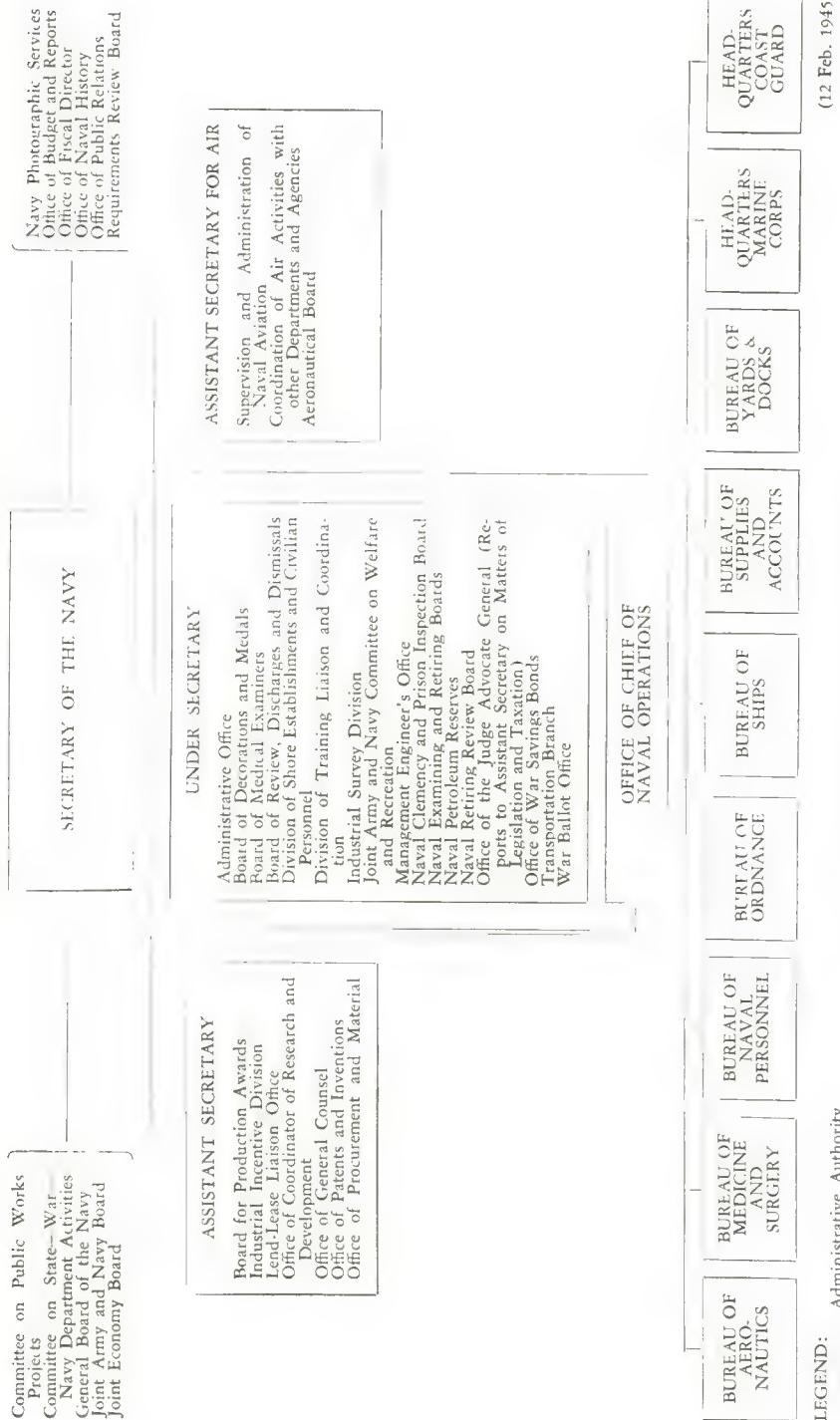


Figure 71. Organization of the Navy Department.

Every feature of the Navy which may possibly affect the health and well-being of personnel, including sanitary features of ships being built, berthing, ventilation, and heating on board ship, provisions for care of the wounded in battle, ambulances, surgical instruments, medical supplies, food, water and clothing used by the Navy, and industrial hygiene, are matters of concern to the Medical Department.

The mission of the Medical Department, aptly summarized, is: "To keep as many men at as many guns as many days as possible," and this summarization, in general, qualifies the duties of medical personnel in the Navy. Accomplishment of this mission is obtained largely through safeguarding the health of Navy and Marine Corps personnel by employing the best methods of hygiene and sanitation, both ashore and afloat, and by adopting for use all such devices or procedures as will in any way tend to an increase in military efficiency. The responsibility and duties of the Bureau of Medicine and Surgery in connection therewith are set forth in articles 457 and 458 of *Navy Regulations*.

Officers of the Medical Department of the Navy are individually concerned with the accomplishment of the mission of the Medical Department and, because duty in the Navy is both military and professional, their professional functions are closely associated with their military duties. Officers of the Medical Department, like all officers in the Navy, are subject to serve on courts-martial, boards of investigation, courts of inquiry, etc.

Navy Nurse Corps. An important part of the Bureau of Medicine and Surgery, the Navy Nurse Corps, has grown in number from 20 members when established by Congress in May 1908 to 9,000, its size at the beginning of 1945. Navy nurses are serving in Africa, Europe, in the Solomons, the New Hebrides, and the Aleutians, as well as in North and South America. They serve on hospital ships and evacuation transports. They do not serve on ships in combat but are at hospitals behind the line of battle.

Officers of the Nurse Corps are vested with authority next after the commissioned officers of the Medical and Dental Corps in medical and sanitary matters and all other work within the line of their professional duties. The Superintendent of the Navy Nurse Corps, holding the rank of Captain, is responsible to the Surgeon General who is the Chief of the Bureau of Medicine and Surgery.

11C7. The Bureau of Supplies and Accounts (BuSandA). The Bureau of Supplies and Accounts (headed by the Paymaster General of the Navy) is charged with the procurement, purchase, receipt, custody, warehousing, issue, and shipment of all standard supplies, fuel, and other materials for the Navy, except supplies for the Marine Corps, and except the procurement of certain special items of ordnance material and the storage and issue of medical stores, ammunition, projectiles, mines, and explosives. It recommends the detailing to duty of officers of the Supply Corps.

It exercises administrative supervision over fuel plants, commissary activities, supply depots, and storehouses at navy yards and stations. It conducts sales for

the disposal of condemned, salvaged, and scrap materials, and condemned vessels. It prepares and submits estimates of funds required for freight, fuel, clothing, pay, allowances, subsistence, and transportation of Navy personnel.

It recommends the necessity for, and the location, type, size, and interior arrangements of supply spaces afloat. It does the same for storehouses ashore. It has charge of the procurement and disbursement of funds for the payment of military and civilian pay rolls, and for all articles and services procured for the Navy, as well as the keeping of all money and property accounts.

This Bureau supervises the issuance of War Savings Bonds purchased by Navy personnel, both military and civilian. It keeps and audits the property and money accounts of the Naval Establishment.

11C8. The Bureau of Aeronautics (BuAer). This Bureau makes recommendations to the Chief of Naval Operations as to the technical characteristics and limitations of naval aircraft, naval aviation equipment, and manufacturing sources therefor involved in the formulation of operating plans; conducts research, makes tests, and participates with other government agencies and with industry in the design and development and improvement of such aircraft and equipment; contracts for naval aircraft and aviation equipment of a technical, specialized nature; provides for plant facilities as necessary to meet production programs. It schedules, in accordance with requirements, the production of naval aircraft and naval aviation equipment and assists manufacturers in the production thereof, to the end that the various items may be delivered in the quantities, of the qualities, and at the times specified. Further, it collaborates with the Bureau of Yards and Docks in the design, construction, and alteration of all aeronautic shore establishments, and maintains and repairs such establishments. This Bureau initially outfits and thereafter replenishes with aeronautical equipment and material all bases afloat and ashore from which naval aircraft operate, and supervises the service, repair, overhaul, and salvage of naval aircraft and aviation equipment.

This Bureau provides and distributes, with minor exceptions, all photographic material for the Navy and Marine Corps, and carries out the termination of contracts, the settlement of claims, and the disposition of property resulting from such terminations.

D. HEADQUARTERS, UNITED STATES MARINE CORPS

11D1. Background. The Continental Marines, forerunners of the present Marine Corps, were organized by resolution of the Continental Congress, 10 November 1775. The present United States Marine Corps was established by Act of Congress, 11 July 1798.

11D2. Fleet Marine Force. The Fleet Marine Force, although based ashore, is an integral part of the United States Fleet under the direction of the Commander in Chief, United States Fleet. It is maintained as a mobile force in immediate readiness for use in operations undertaken for the seizure from the sea of enemy territory and the defense thereof. The force is composed of infan-



Figure 72 U S Marines wade ashore on one of the islands of the Eniwetok Atoll in the Pacific.

try, artillery, aviation, and tank units, and signal, engineering, and chemical troops. Marine Corps aviation, while expanding to a greater degree than the Corps as a whole, has continued to specialize in the providing of air support to troops in landing or subsequent ground operations.

Separate Marine detachments are provided as part of the crews of battleships, cruisers, and aircraft carriers, and for guard duty in the Navy Department and in the shore establishments.

11D3. Marine Corps Women's Reserve. In November 1942, the Marine Corps Women's Reserve was established, the authorized strength being 1,000 commissioned officers and 18,000 enlisted women. The purpose of this organization is to release male Marines for service in combat areas, and members of the Women's Reserve are now serving overseas as well as within the United States. This Corps is administered by the Director of Personnel, Marine Corps, under the general supervision of the Commandant. The Director of Personnel, Marine Corps, is charged with the procurement, instruction, discipline, organization, administration, and mobilization of the Women's Reserve.

11D4. Commandant of the Marine Corps. The Commandant of the Marine Corps is charged with and responsible for the procurement, discharge, education, training, discipline, and distribution of officers and enlisted personnel of the Marine Corps, including the Marine Corps Reserve, and its equipment, supply, administration, and general efficiency.

The Headquarters of the Marine Corps is organized as the Office of the Commandant and two staff departments.

In the Office of the Commandant are the Assistant to the Commandant, who acts as Chief of Staff, the Director of Personnel, and several directors of divisions with specialized functions such as Plans and Policies, Personnel, and Aviation. The senior naval aviator detailed to duty in the Division of Aviation has the title of Director of Aviation, Marine Corps. He is the Assistant to the Commandant for Air and is adviser to the Commandant on all matters of policy pertaining to Marine Corps aviation.

11D5. Staff agencies. The staff agencies are: (1) *the Paymaster General* of the Marine Corps who has supervision of matters relating to pay and allowances of the Marine Corps; and (2) *the Quartermaster General* of the Marine Corps who has supervision of the purchase of and payment for military supplies.

E. THE UNITED STATES COAST GUARD

11E1. Operation of the United States Coast Guard. The origin of the Coast Guard dates from 4 August 1790 when there was created by act of Congress what was known as the Revenue Marine which later became the Revenue Cutter Service. In 1915 the Revenue Cutter Service and Life Saving Service were merged into one organization—the United States Coast Guard. In 1939 the former Lighthouse Service was consolidated with the Coast Guard. The Coast Guard constitutes by law a part of the military forces of the United States, operating under the Treasury Department in time of peace, and as part of the Navy,

subject to the orders of the Secretary of the Navy, in time of war or when the President so directs. When it functions as an integral part of the Navy, it retains its own identity, organization, uniforms, and insignia. This organization has fought as part of the Navy in all our wars since its founding.

The Coast Guard, in time of peace, operates as a Federal maritime regulatory agency in the prevention, detection, and suppression of violations of the maritime and customs laws, the saving and protection of life and property at sea and in the coastal waters of the United States, and the promotion of the safety and security of vessels using our waters for commerce or pleasure.

The Coast Guard maintains an academy at New London, Connecticut, for the professional instruction of cadets for commissions in the service.

During war, the Coast Guard's armed fleet of large cruising cutters forms part of the sea frontier forces engaged in patrol and in the protection of convoys along our coast, and operates under the direction of the naval forces afloat. However, the increases in the size of the Coast Guard since 1941 was necessitated chiefly by additional duties in connection with captain-of-the-port activities in the regulation of merchant shipping, the supervision of the loading of explosives, and the protection of shipping, harbors, and waterfront facilities. Also certain transports and other naval craft, including landing barges, were manned by Coast Guard personnel, and a beach patrol (both mounted and afoot) and coastal lookout stations were established. The Coast Guard also undertook the manning and operating of naval section bases and certain inshore patrol activities formerly manned by naval personnel, and furnished sentries and sentry dogs for guard duty at various naval shore establishments. A specially trained fireboat service was provided by the Coast Guard for the protection of piers in the large harbors of the United States.

Coast Guard aviation has expanded tremendously and has been under the operational control of sea frontier commanders, for convoy coverage, and for anti-submarine patrol and rescue and other duties. Other squadrons outside the United States are employed in ice observation and air-sea rescue duty.

11E2. Coast Guard Reserve. A feature peculiar to the Coast Guard is the Temporary Reserve, which consists of officers and enlisted men enrolled to serve without pay. Members of the Temporary Reserve have full military status while engaged in the performance of such duties as pilotage, port security, and guarding of industrial plants, either on a full- or part-time basis. The Coast Guard Auxiliary, which is a civilian organization, has contributed much of its manpower to the Temporary Reserve, the result being a substantial saving in manpower to the military services. The Coast Guard has a Women's Reserve of the Coast Guard Reserve, the SPARS, similar in most respects to the Women's Reserve of the United States Naval Reserve. Many SPARS are serving overseas in this war.

Headquarters. The Commandant of the Coast Guard, an officer of the rank of admiral, directs the administrative affairs of the Coast Guard, and maintains his office in the Coast Guard Headquarters in Washington, D. C. The



Figure 73. A United States Coast Guard Cutter steams up to a destroyer in the North Atlantic.



Figure 74. United States Coast Guard cadets on parade grounds at the United States Coast Guard Academy, New London, Connecticut.

headquarters are organized on a functional basis. In addition to the offices of the Commandant and Assistant Commandant, which constitute the over-all directing activities, it has six divisions: Personnel, Material, Operations, Inspection, Finance, and Legal. There are sixteen Coast Guard districts in the United States and its territories and possessions. Each of these districts operates under a district Coast Guard officer, who is under the supervision of the commandants of the various naval districts.

F. MISCELLANEOUS ACTIVITIES

11F1. Naval Communications. This division, in the Office of the Chief of Naval Operations, is charged with the preparation, readiness, and logistic support of the operating forces comprising the several fleets, seagoing forces, and sea frontier forces of the United States Navy, in so far as communications are concerned.

This division administers the operation of the Naval Shore Communication Systems. It supervises merchant ship communications; naval postal affairs; V-Mail; and the procurement, assignment, and protection of naval frequencies. It also prepares communication instructions, signal books, call-sign books and cryptographic aids and allowances thereof, as well as communication personnel plans.

The division of Naval Communications determines military characteristics and allowances of radio, radar, sonar, electric visual, and special signaling devices; radio and radar navigational aids and associated devices; and military communication aspects of legislation, treaties, and agreements. It distributes registered publications, and non-registered communication publications, and operates the Navy Department Communication Office, communication intelligence, and communication security.

Another and most important duty of the division is the establishment of instructions covering the security of communications which are secret or confidential in nature.

11F2. Naval Intelligence. The Intelligence Division is charged with the collection and evaluation of information for the Department and for other naval activities. It publishes and disseminates such information to the Navy and to government officials requiring it, and keeps in close touch with all naval activities both in and out of the Navy Department. It supervises naval censorship and is responsible for the security of naval information.

This division cooperates with the other executive departments of the Government in discovering persons engaged in activities inimical to the United States. It supervises offices in each naval district, administers all United States naval attachés and liaison officers abroad, and is the official channel of communication in the United States for all foreign naval attachés. The Office of Naval Records and Library, in addition to maintaining an extensive technical library for reference purposes, also collects and classifies, with a view to publication, naval records of historical value.

11F3. The Hydrographic Office. The Hydrographic Office, located in Suitland, Maryland, was formally established by Act of Congress approved in 1866, but had been in the course of development under the name of the Depot of Charts and Instruments since 1830. During the 19 years before the War Between the States the distinguished oceanographer, Matthew Fontaine Maury, directed the work of the Hydrographic Office and it gained world renown for its brilliant pioneering research in the fields of hydrography, meteorology, and oceanography.

The Hydrographic Office is charged with the execution of hydrographic surveys in foreign waters and on the high seas; the collection and dissemination of hydrographic and navigational information and data; the preparation and printing by its own personnel and with its own equipment of maps and charts relating to and required in navigation, including confidential, strategical, and tactical charts for naval operations and maneuvers; the preparation and issue of sailing directions (pilots), light lists, pilot charts, navigational manuals, periodicals, and radio broadcasts for the use of all vessels of the United States and for the benefit and use of navigators generally; the furnishing of the foregoing to the Navy and other public service, and the sale of charts and publications to the mercantile marine of all nations and to the general public, at the cost of printing and paper.

This office maintains intimate relations with the hydrographic offices of all foreign countries; with the International Hydrographic Bureau, Monaco; and through branch hydrographic offices and sales agents with mariners and the general public. The Hydrographic Office is charged with the publication and supply of naval air pilots; aviation charts and publications for special naval purposes; as well as the collection and dissemination of timely information which will contribute to the safe navigation of aircraft over the seas. The Hydrographic Office cooperates with the National Academy of Science by conducting research work in oceanography, especially in soundings and in the collection of the temperatures of the surface of the sea.

11F4. The Naval Observatory. The Naval Observatory also had its beginnings as a part of the Depot of Charts and Instruments in Washington, D. C. Since 1866 the latter has been known as the United States Naval Observatory.

It provides astronomical, aero logical, and navigational data, instruments and services. It determines the standard time for the United States, disseminating time signals during the last five minutes of each hour. Certain of these signals are radio broadcast by the Naval Communication Service for world-wide use by navigators, surveyors, scientists, or any one requiring the most accurate time. The Nautical Almanac Office prepares and issues annually three publications. *The American Nautical Almanac* is designed primarily for the use of navigators at sea. *The American Air Almanac* contains much of the same information in a form suited to the special requirements of aerial navigators. *The American Ephemeris and Nautical Almanac* contains most of the information in the other two volumes to a higher degree of accuracy and, in addition, specialized material needed by scientists.

The Naval Observatory inspects, tests, develops, experimentally constructs,



Figure 75. Each month more than 3,000,000 charts roll off the presses of the U.S. Navy Hydrographic Office, giving detailed, vital data of the harbors and expanses of the seven seas.

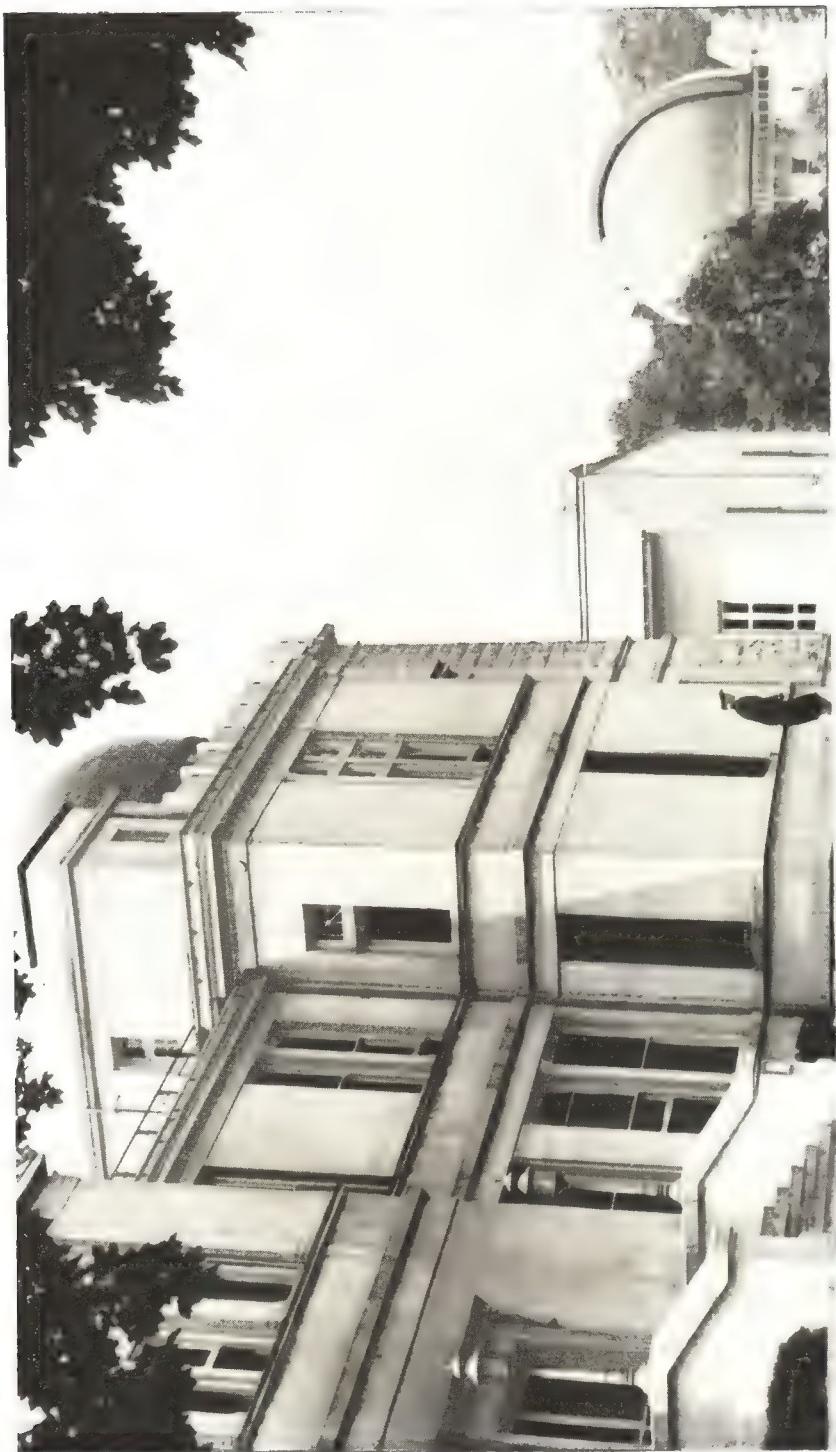


Figure 76. Naval Observatory, Washington, D. C.

repairs, manufactures, stores, and distributes designated navigational and aeronautical instruments and related material for the Navy Department and other governmental activities authorizing and furnishing funds. It takes an active part in the design and construction of the optical and electrical instruments needed for its work, and has made notable contributions to mathematics, celestial mechanics, fundamental astronomy, optics, and the design of astronomical, navigational, and related instruments.

11F5. Office of Public Relations. This office is in the Executive Office of the Secretary. Its objectives are fourfold: (a) to satisfy the American public's justifiable interest in the activities of its Navy; (b) to procure for the men of the Navy public recognition through press, radio, and motion pictures of their accomplishments; (c) to insure continuing public support for the prosecution of the war in the Pacific subsequent to the defeat of Germany; (d) to foster a sustained interest in the Navy in the post-war period. These objectives are accomplished through the Program Planning Branch, the Media Branch, and the Technical Services Branch, operating under the supervision of the Director of Public Relations.

11F6. The United States Naval Academy. The United States Naval Academy was founded at Annapolis, Maryland, in 1845 while George Bancroft was Secretary of the Navy. The first Superintendent was Commander Franklin Buchanan who had sailed with Oliver and Matthew Perry, Decatur, Bainbridge, and David Porter when they were at the height of their careers. Buchanan had earned the reputation as an educated and efficient officer and it was he who was the founder of the Academy's traditions of sound practical scholarship and rigid discipline.

The Academy started with between fifty and sixty midshipmen and six instructors. Time has proved the initiation of this institution to have been an essential step toward producing a thoroughly competent officer corps. Furthermore, the Academy has, as well, nurtured a high degree of unity, general efficiency, and morale within the Navy. It has furnished naval officers for service in five different wars in which our country has fought: the Mexican War, the War Between the States, the War with Spain, and the two World Wars. During the present conflict more than three thousand midshipmen are in training at this school.

11F7. The Naval War College. The Naval War College, which is located at Newport, Rhode Island, was founded in 1884. Its most enthusiastic advocate was Rear Admiral Stephen B. Luce and its most famous and influential teacher and president was Rear Admiral Alfred T. Mahan. Established far earlier than similar institutions abroad, its purpose was to provide post-graduate instruction in history, international law, and the higher branches of naval art and science. The following courses are at present provided:

The Naval War College correspondence courses.

Preparatory staff course for Reserve officers.

Command course for Regulars.



Figure 77. A glimpse of the United States Naval Academy from the air.



Figure 78. For a hundred years the Naval Academy at Annapolis has been the main source of officers for the United States Navy. Pictured above is the 1945 graduating class.

Special course for officers of Army, Navy, and Marine Corps ultimately destined for the Joint Chiefs of Staff College.

11F8. The Naval Reserve. The purpose of the Naval Reserve is to provide a force of qualified officers and enlisted men who are available for immediate mobilization in the event of a national emergency and who, together with the active and retired personnel of the regular Navy, can effectively meet the needs of the expanding Naval Establishment while an adequate flow of newly trained personnel is being established.

The Naval Reserve is considered a part of the United States Navy and consists of the following: (1) the Fleet Reserve, (2) the Organized Reserve, (3) the Volunteer Reserve, (4) the Merchant Marine Reserve, and (5) the Women's Reserve.

Women's Reserve. Members of the Women's Reserve are serving in 500 shore stations in the continental United States, as well as at activities in the Territory of Hawaii. Organized as an integral part of the Naval Reserve in July 1942, the Women's Reserve had grown to 83,000 by the end of 1944. Officers and enlisted personnel have taken over a wide range of billets to fill expanding complements and to replace men released for service in the war zones.

Officers are engaged in both technical and administrative duties. Communications, supply, disbursing, aerology, technical and administrative radar, and medicine are but a few of the fields in which they serve. Enlisted women are eligible for 38 of the ratings established for Navy men. These range from yeomen, storekeepers, and radiomen to ratings in various specialties and in aeronautical activities. They serve in virtually every type of shore activity from naval hospitals and air stations to supply depots, training centers, and navy yards. Members of the Women's Reserve hold the same ranks and rates as Navy men and receive the same pay. They may serve anywhere in the American area and the Territories of Hawaii and Alaska although they may not be sent outside the continental United States without their prior consent. The name WAVES comes from the phrase, "Women Accepted for Volunteer Emergency Service."

11F9. Naval Reserve Midshipmen's Schools. The Reserve Midshipman Program of voluntary training was announced 26 June 1940 by the President of the United States. At the present time, the personnel of this program is composed of enlisted men of the Navy and Naval Reserve, who are citizens of the United States, between the ages of 19 and 30 years, who must agree not to marry until commissioned or otherwise separated from the program, if unmarried at the time reported for training. (Applicants who are married prior to the date they report for training are eligible for consideration.) In addition, they must meet all physical requirements for appointment as Ensign (DL), and ordinarily must have completed successfully eight semesters in, or possess a Bachelor's Degree from, an accredited university or college. Those, however, who have completed successfully six or four semesters of work toward a degree in an accredited university or college, and have been on active duty four or



Figure 79. Much of the graduate work taken by naval officers is offered by the United States Naval War College at Newport, Rhode Island, pictured above. The Naval Training Station is in the upper left hand corner.

eight months respectively, are eligible for consideration. College work must have included the successful completion of two semester courses in mathematics of college grade. All candidates for reserve midshipmen training must be recommended by their Commanding Officers as possessing outstanding leadership and officer-like qualities.

There are six Naval Reserve Midshipmen's Schools in operation at the present time (1 June 1945).

U. S. N. R. Midshipmen's School	Columbia University, New York, N. Y.
U. S. N. R. Midshipmen's School	Northwestern University, Abbott Hall, Chicago, Ill.
U. S. N. R. Midshipmen's School	University of Notre Dame, Notre Dame, Ind.
U. S. N. R. Midshipmen's School	Cornell University, Ithaca, N. Y.
U. S. N. R. Midshipmen's School	U. S. Naval Academy, Annapolis, Md.
U. S. N. R. Midshipmen's School	Fort Schuyler, The Bronx, New York, N. Y.

All reserve midshipmen candidates must successfully complete an indoctrination period consisting of approximately four weeks. At the end of this period they are given temporary appointments as naval reserve midshipmen, and immediately begin a three months' course of intensive study in the five basic subjects: navigation, seamanship, ordnance and gunnery, communications, and damage control and engineering. The complete curriculum includes also a course in recognition of ships and aircraft, one in chemical warfare, and one in leadership. All midshipmen participate in frequent military, gunnery, and seamanship drills, and gain shipboard experience on harbor craft.

Upon completion of this training, the successful candidate is commissioned an ensign in the United States Naval Reserve, and receives his orders either to sea duty or to some phase of advanced training.

G. SHORE ESTABLISHMENTS

11G1. General. The shore establishments include all naval shore activities except the Navy Department and certain specific activities such as fleet air bases, outlying bases, and advanced bases which are directed by the forces afloat.

11G2. The Naval Districts. The United States, including its territories and island possessions, is divided into 16 naval districts and two river commands, each under a commandant who is usually of the rank of rear admiral. These districts are listed as follows:

Number	District	Headquarters
First	New England, less Connecticut	Boston, Mass.
Third	New York, Connecticut, and upper New Jersey	New York, N. Y.
Fourth	Pennsylvania, lower New Jersey, and Delaware	Philadelphia, Pa.
Fifth	Maryland, Virginia, West Virginia, and north coastal region of North Carolina	Navy Operating Base, Hampton Roads, Va.
Potomac River	The Potomac River Area, including the District of Columbia, and certain bordering counties in Mary- land and Virginia	Navy Yard, Washington, D. C.
Naval Command	Anne Arundel County, Maryland	United States Naval Academy, Annapolis, Md.
Severn River		

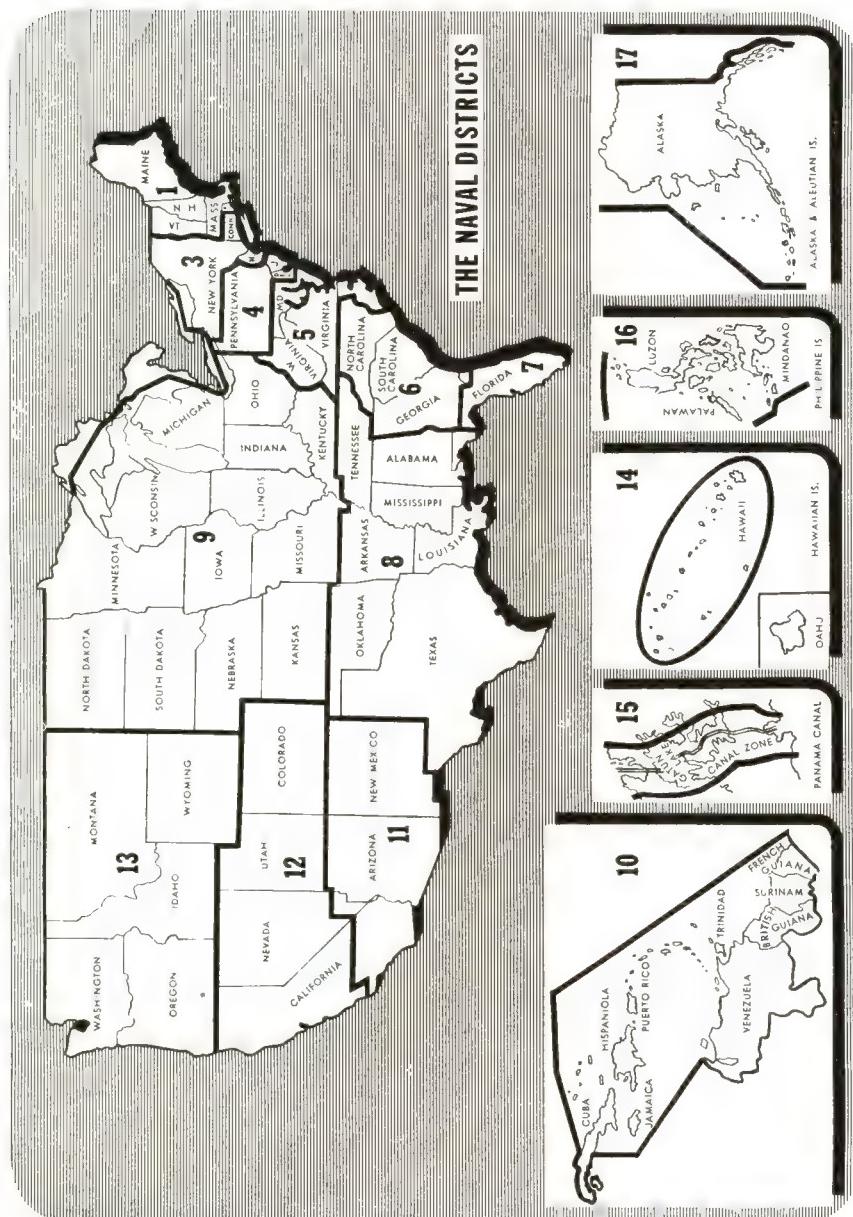


Figure 80.

<i>Number</i>	<i>District</i>	<i>Headquarters</i>
Sixth	North Carolina (except north coast), South Carolina, Georgia	Charleston, S. C.
Seventh	Florida, except portion of northern Florida lying west of the Apalachicola River	Miami, Florida
Eighth	South Central States	New Orleans, La.
Ninth	North Central States	Great Lakes, Ill.
Tenth	Caribbean possessions, territories, reservations and United States naval activities in Venezuela, British Guiana, Surinam, and French Guiana	San Juan, Puerto Rico.
Eleventh	Southern third of California, Arizona, and New Mexico	San Diego, Calif.
Twelfth	Northern two-thirds of California, Nevada, Utah, and Colorado	San Francisco, Calif.
Thirteenth	Washington, Oregon, Idaho, Montana, Wyoming	Seattle, Wash.
Fourteenth	Hawaiian Islands-Midway Area	Pearl Harbor, T. H.
Fifteenth	Panama Canal Zone	Balboa, C. Z.
Sixteenth	Philippine Islands	Cavite, P. I.
Seventeenth	Alaska, including the Aleutians	Kodiak, Alaska

The United States and island possessions are divided into naval districts for purposes of administration and for military reasons. Each naval district is commanded by a designated commandant, usually a rear admiral, who is the direct representative of the Navy Department, including its several bureaus and offices. The district is organized into units or groups according to the character of its activities and situation, with each group or unit under the command of an officer of that group or unit. The commandant is charged with coordinating the groups and units in his district to develop complete intercommunication and cooperation among them. The organization of a naval district establishes, between the commandant and the commanding officers of the groups and units included in the district, relations similar to those which exist between the commander in chief of a fleet and the various units of his command. The administrative units or groups comprise all activities which are so grouped in one place as to come logically under the immediate military control of one commanding officer. These units or groups include such activities as navy yards, torpedo stations, training stations, submarine bases, and schools.

Surface craft and aircraft are assigned under the command of the commandant of a naval district.

The mission of the commandant of a naval district in coast defense is to control the sea communications within the district, repulsing hostile attacks on the seacoast, or upon naval vessels or merchant shipping in or off harbors or in the coastwise sea lanes.

11G3. Operating bases. The major operating bases are located in harbors and bays where there are large protected fleet anchorages, such as, for example, Hampton Roads on the East Coast, and San Francisco Bay on the West Coast.

These bases furnish the vessels of the fleets with needed services. They have receiving stations for the transfer of personnel to and from the vessels afloat; supply depots for the supply of equipage and stores; medical storehouses; oil storage tanks for fuel oil; and district craft such as tugs, lighters, and fueling barges to service the vessels at anchor.

In addition to these facilities, other activities such as training stations, air stations, and hospitals may be located on the bases.

These major operating bases do not provide repair facilities for larger ships, though in some cases navy yards are physically located within their limits. Smaller operating bases for the servicing and repair of the smaller craft of the sea frontier forces and the inshore patrol are located along both coasts and in the outlying districts.

11G4. Navy yards. The navy yards contain highly specialized equipment for the manufacture of naval material and its upkeep and repair. Dry docks, building ways, and fueling equipment are located at these yards. For the most part, civilian labor is employed. The yards also furnish necessary provisions, supplies, and equipment to ships. The Bureau of Ships administers the upkeep operations of the Industrial Department of these plants. All matters dealing with employment of civilian labor are under the supervision of the Director of Shore Establishments and Civilian Personnel, in the Office of the Under Secretary of the Navy.

12

THE NAVY AFLOAT

A. PEACETIME ORGANIZATION OF THE FLEET

12A1. Need for knowledge of peacetime organization. In any discussion of the organization of the United States Fleet, it must be borne in mind that under existing war conditions, any description of the composition of the Fleet is purely academic. If it has any existence at all, its theoretical organization is useful only for the administration of material and personnel.

Knowledge of the organization of the United States Fleet and the independent forces which collaborated with it as it existed in pre-war days will be helpful in understanding its wartime operation in special groupings which we know as task forces. From that original, pre-war organization it will be easy to follow the steps by means of which the organization of the forces afloat evolved from an organization based on the *types of vessels*, through an organization based on the *area* in which they served, into the methods at present utilized, namely that of special groupings of the forces, called *task forces*.

12A2. Organization of the United States Fleet. Prior to 1 February 1941, the Commander in Chief, United States Fleet, had general charge of all vessels of the United States Navy except those vessels assigned to the Asiatic Fleet, Special Service Squadrons, Naval Transportation Service, and other special detachments. The Fleet was organized in two interlocking manners: (1) by types, and (2) task functions. In a *type organization*, vessels were organized by types, that is battleships with battleships, cruisers with cruisers, etc. In a *task organization* vessels were organized by the function or mission they were to perform, such as the Battle Force, the Scouting Force, the Base Force, and the Submarine Force. As this second organization was the habitual operating set-up of the forces afloat, prior to 10 April 1942 its subdivisions will be considered separately.

Battle Force. The Battle Force was the main body of the Fleet and generally operated in the Pacific area. It consisted of battleships, carriers, destroyers, aircraft and a limited number of cruisers and minecraft. Each group of vessels of the same type was commanded by a force commander, directly responsible to the Commander, Battle Force. Naturally, each force was further subdivided. For example, Destroyers, Battle Force, commanded by a senior rear admiral, was divided into flotillas, squadrons, and divisions. A destroyer *division*, commanded by a senior commander, consisted of two sections of two ships each. Two or more *divisions*, plus a flagship, constituted a *squadron*, commanded by

a junior captain. Two or more squadrons, plus a leader, made a *flotilla*, normally commanded by a senior captain.

Battleships and cruisers were not organized so highly and the division was the only subdivision of these types of ships. Aircraft were divided into wings, groups, and squadrons. Aircraft organization, as in the case of ships, was by types; fighters, scouting planes, dive bombers, torpedo planes, etc., depending upon the use for which the plane was designed. Minecraft were organized into squadrons and divisions, each group consisting of vessels of the same type. Submarines for administration were divided into squadrons and divisions; carriers into divisions.

Scouting Force. The second major subdivision of the Fleet was the Scouting Force which was in itself divided into four groups: cruisers, submarines, aircraft (ship-based) and patrol wings (land-based), and a small number of destroyers to act as plane guards and short-range scouts.

The types of ships employed in the Scouting Force is significant. The purpose of this force was the sweeping and searching of large areas to determine the presence and extent of enemy activity. Battleships normally were not used in the Scouting Force since the old battleships lacked the speed for such operations.

The patrol wings were the groups of large, multi-motored flying boats used for scouting. The information they obtained was primarily negative. For scouting in other areas, long-range land-based planes were used almost exclusively. All of these planes have a cruising range of over 5,000 miles, and were based at a regular or an advanced base. These aircraft should not be confused with the aircraft scouting forces which are the carrier-based land planes or the sea planes attached to the various cruisers.

Submarines are useful as overseas scouts because of their seakeeping abilities and their faculty for lying unseen off an enemy's port from which they may report enemy activities to the Commander in Chief.

Base Force. The third major subdivision of the United States Fleet was the Base Force which contained all the non-fighting ships assigned to the Fleet. It was divided into two major parts: (1) the *train*, which consisted of all the ships required to service the Fleet, such as repair ships, destroyer tenders, submarine tenders, supply ships, store ships, ammunition ships, refrigerator ships, tankers, fleet tugs, seaplane tenders, salvage ships, and hospital ships; and (2) the *transports*, heavy and light, landing barges, and all other types of craft necessary to transport and land troops and supplies in enemy territory.

All ships of the Base Force play an important role in any fleet operation or movement, and its vessels with the exception of the hospital ships, are always heavily escorted on any overseas move. Hospital ships are governed by the Geneva Convention which requires that they be brilliantly lighted, with red crosses on both sides, and that they proceed independently of all other men-of-war.

The other vessels of the United States Navy form more or less independent forces whose duties are away from other units and under normal conditions

have little or no contact with Commander in Chief, although they operate in areas assigned to the senior commander. Such ships would include the Special Service Squadron in the Central American area, the European Squadron in Europe, and the Naval Transportation Service, operating directly under the Navy Department (Chief of Naval Operations).

12A3. Organization of Asiatic Fleet. The Commander in Chief, Asiatic Fleet, was separate and distinct from the Commander in Chief, United States Fleet, and had under his direct jurisdiction all vessels and stations west of the International Date Line and east of Africa. All actual naval forces in this area were comparatively insignificant, consisting of a squadron of destroyers, a division of cruisers, a squadron of submarines, and a few squadrons of aircraft including a patrol wing, and a number of river gunboats. These latter operated in two separate commands known as the South China Patrol and the Yangtze Patrol. The principal duties of the Commander in Chief, Asiatic Fleet were obviously not of a naval character, but more nearly diplomatic, since his principal function was to protect American interests in Asiatic waters.

12A4. Period of transition. In the latter part of the 1930's, it became evident that a more flexible organization than the then existing United States Fleet was needed in order to permit detachment of units to such various parts of the coast of the United States as might be necessary, due to changing international conditions. Troubled affairs were mounting in Europe and it was believed that a larger part of the naval forces should be stationed on the eastern seaboard. Therefore, in February 1941, by executive order, the United States Fleet was changed into three fleets known as the United States Pacific Fleet, the United States Atlantic Fleet, and the United States Asiatic Fleet, each having a full admiral in command. Each was responsible to the Chief of Naval Operations, and the composition of the forces within the fleets was variable, depending upon the current international conditions. The United States Fleet thus became an administrative organization for training purposes and a task organization only when two or more fleets were concentrated or operated in conjunction with each other. When the fleets operated together the senior Commander in Chief assumed the title of Commander in Chief, United States Fleet, and was in command of the joint operations.

Within each fleet the general type organization outlined previously continued in existence. However, with the increasingly strained relations in the Orient the Pacific Fleet was based more and more in the Hawaiian Islands.

The Asiatic Fleet remained as before and operated as an independent fleet. Other subsidiary units were merged with the fleet of the area in which they normally operated. This organization continued in effect until the attack on Pearl Harbor.

B. WARTIME ORGANIZATION

12B1. Major changes. Almost immediately after our entry in the war, it became apparent that for the purpose of exercising command, all oceans must



Figure 81. Fleet Admiral Chester W. Nimitz, U.S.N., Commander in Chief, Pacific Fleet and Pacific Ocean Areas, comes aboard the flagship of Admiral William F. Halsey, U.S.N., Commander, Third Fleet.



Figure 82. High-ranking Navy and Marine officers discuss details of the operation on Saipan during the battle for that Marianas stronghold. Present at the conference aboard a Navy warship are (left to right) Lieutenant General Holland M. Smith, U.S.M.C., Vice Admiral Spruance, U.S.N., Vice Admiral Mitscher, U.S.N., Major General Geiger, U.S.M.C., Rear Admiral Conolly, U.S.N., Rear Admiral Hill, U.S.N., and Brigadier General Del Valle, U.S.M.C.

be regarded as one area, in order that effective coordinated control and the proper distribution of our naval power might be realized. Accordingly, on 20 December 1941, the President changed this organization by making the office of Commander in Chief, United States Fleet, separate and distinct, from the other three Commanders in Chief, and ordered the Headquarters of the Commander in Chief, United States Fleet, to be established in the Navy Department in Washington.

In March 1942, the duties of the Chief of Naval Operations were combined with the duties of the Commander in Chief, United States Fleet. The former Chief of Naval Operations became Commander of the United States Naval Forces in Europe. This move was accompanied by a number of adjustments in the Navy Department organization, calculated, among other things to facilitate logistic support of the forces afloat by providing for their coordination.

In June 1942, the Asiatic Fleet ceased to exist as such. Such of its vessels as were able to escape the enemy were reorganized into a group known as the Southwest Pacific Force.

Under the exacting conditions of the present war, which is being fought on the seven seas, it is impossible to limit operations to these two main forces. Accordingly a major realignment of the forces afloat has been made. This assignment maintains the Pacific and Atlantic Fleets as the main administrative units of the forces afloat, but breaks them down in various permanent fleets, forces, or major task forces.

Another change brought about by circumstances of the recent war is the increase in the number of joint undertakings by the Army and Navy. These joint undertakings have led to new conception of higher command. Naval officers command not only naval forces, but all forces in certain areas. In other areas, notably the Southwest Pacific, where joint undertakings are necessary but the land activities predominate, naval forces are under the command of the Army officer who commands this theater. As a consequence, higher naval commands tend to be area commands rather than fleet commands in the old sense.

12B2. Fleets. The forces of the United States Fleet, with the exception of the Sea Frontier Forces which constitute special task forces of the Fleet, are assigned to fleets numbered as follows:

First	Pacific
Second	Atlantic
Third	Pacific
Fourth	South Atlantic
Fifth	Pacific
Sixth	Atlantic
Seventh	Southwest Pacific
Eighth	Northwest African Waters
Ninth	Pacific
Tenth	Anti-submarine Forces under CominCh
Twelfth	European Waters

The commands of these fleets are area commands of naval forces. The fleets are not permanently organized as to size and composition, nor is the individual

fleet free to move in any area as a fleet. Instead the fleets consist of such forces as may be assigned to the naval commanders in each principal area, and they vary in size and composition as component forces are shifted from one area to another. The naval air forces employed within the various area commands include both carrier-based aircraft and shore-based aircraft.

The Commander in Chief, United States Pacific Fleet, directs all Navy and Army operations in all sea areas of the Pacific Ocean except those in the Southwest Pacific, which are directed by the Supreme Commander in that theater, and those in the Southeast Pacific, which are conducted by Commander Southeast Pacific Force under CominCh.

The Commander in Chief, Atlantic Fleet, has general command of all operations of the United States naval forces in the Atlantic, except those which may be directly controlled by CominCh.

The seagoing forces. Assigned to the various fleets mentioned above are the fleet groups which comprise the so-called seagoing forces. They consist of seagoing vessels, submarines, aircraft, and landing craft. The designations for the fleet groups are those actually used in fleet organization. (The term *force* is no longer applied to battleship, cruiser, or destroyer groups.) For example, the battleships assigned to the Pacific Fleet are designated as *Battleships, Pacific Fleet*.

The *fleet groups* are as follows: Battleships, Cruisers, Destroyers, Air Forces, Submarine Forces, Amphibious Forces, Service Forces.

An air force is composed of carrier forces, carrier aircraft squadrons, seaplane tenders, and patrol wings.

An amphibious force is made up of divisions of transports, and flotillas of landing ships and landing craft.

A service force is made up of vessels which serve the Fleet, such as repair ships, supply ships, oilers, and hospital ships. It also has been found practical to include the mine forces as part of the service forces.

Usually considered a part of the seagoing forces but not included in the fleet groups, are the three *special groups*: Sea Frontier Forces, Naval Transportation Service, and vessels on special duty.

12B3. Sea frontier forces. The sea frontier forces are forces of escort and patrol vessels created primarily to deal with the submarine menace in our coastal sea areas. In organizing these forces, it was found that special command arrangements were needed, since their operations would of necessity overlap the boundaries of the naval districts and would also take place in those coastal zones in which the Army and Navy both exercise control. It was felt for these reasons that these forces should not be made a part of the local defense forces. Therefore, naval commands called *sea frontiers* were established, including the coastal zones in addition to the land areas of the coastal frontiers created by joint Army and Navy agreement. There are eight of these frontiers with a vice or rear admiral at the head of each. The sea frontiers and their abbreviations are:

Eastern Sea Frontier

EASTSEAFRON

Gulf Sea Frontier

GULFSEAFRON



Figure 83. YMS 88. Minesweeper, one of the most important types of distinct craft



Figure 84. A million tons of warships. This picture, taken in February, 1944, reveals nine aircraft carriers, a dozen battleships, and scores of cruisers, destroyers, and supply vessels. These ships were only a portion of the first U.S. task force to anchor in waters that were Japanese prior to the attack on Pearl Harbor.

Caribbean Sea Frontier	CARIBSEAFRON
Panama Sea Frontier	PASEAFRON
Western Sea Frontier	WESTSEAFRON
Alaskan Sea Frontier	ALSEAFRON
Moroccan Sea Frontier	MORSEAFRON
Hawaiian Sea Frontier	HAWSEAFRON
Philippine Sea Frontier	PHILIPPINESEAFRON

Each sea frontier is commanded by a flag officer who may or may not also be the commandant of a naval district. All sea frontier commanders are direct subordinates of the Commander in Chief, United States Fleet, and Chief of Naval Operations.

12B4. Naval district craft. Among the hardest-working ships in the Navy are the district harbor craft. Not primarily fighting ships, they are for the most part unarmed. They are utilitarian ships which are always at work on a great variety of tasks in continental and overseas harbors, in sea frontiers, convoys, amphibious forces, and in the task forces. They are small but despite their lack of size are of incalculable importance to the Navy. Their designations usually start with the letter Y, as YO, fuel oil barge, and YDG, degaussing ship. The principal type is the YP, district patrol vessel. These craft are armed, and usually are under 120 feet in length. Some other types are: YT, harbor tug; YNg, gate vessel; YMS, district minesweeper; and YAG, district auxiliary.

12B5. Naval local defense forces. These forces consist of small patrol craft, small minelayers, and minesweepers which operate inshore in naval districts and in outlying bases. Those in the districts are under the command of the district commandants; those in outlying bases are under the command of the forces afloat.

C. TASK FORCES

12C1. Purpose and use of task forces. A naval task force is, as the name implies, a force specially organized for the accomplishment of a specific task. As the tasks may vary, so does the task force. It may consist of one type or it may be an organization of groups composed of two or more types. There is therefore no standard composition for a task force. Obviously the task force assigned to the raid on Makin Island would be composed differently from that assigned to convoy ships to Europe. The most significant generalization that can be made about the composition of task forces is that each force should contain combatant ships such as carriers, destroyers, cruisers, submarines, and battleships, supported by an attendant train, which might include transports, hospital, repair, supply ships, and oilers, as would be adequate to perform the task assigned.

Operations are now conducted by task forces instead of fleets. Such task forces are formed as task forces of a particular fleet and may be composed of part or all of the forces of that fleet. They may also include reinforcements from the fleets of other areas. Thus, if a certain specific campaign is contemplated in the South Pacific, the Commander in Chief, Pacific Fleet, may detach forces from his own fleet and send them to the South Pacific to operate as part of a task

force of the South Pacific Command. Or should all available forces in the Pacific be desired for a campaign in the Main Pacific Area, they would be assembled as a task force of the Pacific Fleet. Organization into fleets and task forces makes coordination of naval operations with those of the Army possible in combined operations.

Task forces on a large scale have recently been featured in the news. The battles of the Coral Sea (May 1942) and of Midway Island (June 1942) were clashes between American and Japanese task forces of which the central units were carriers. In fact, the task forces never did come within sight or gun range of each other, as both battles were fought entirely by the carrier-based planes; and, in the Midway Island battle, the Japanese force (which included at least four battleships) retired as a result of the air attack before our task force could come up to engage it. The raid of the Marshall and Gilbert Islands in the South Pacific (February 1942), the raids of commandoes landed from British warships on the French and Norwegian coasts, and the trips of the carrier *Wasp* and her escort to Malta to deliver planes to the British base are all examples of typical task force operations.

Formerly, the usual practice in making up a task force was to draw upon existing units for one or more ships as the case might require. For example, a destroyer flotilla might have to sacrifice a division for a limited time. At present, due to the fact that task forces are being so widely used, semi-permanent assignments have been made, and task forces remain together as an entity even when in port, awaiting assignment to another mission. These semi-permanent organizations may consist of as many as one or two battleships, a similar or larger number of carriers, and such cruisers, destroyers, minecraft, and submarines as are necessary for their protection and for fulfillment of the particular mission or missions.

12C2. Task force action. The following excerpt from the *Bureau of Naval Personnel Information Bulletin* (January 1944) illustrates a task force in action:

The "Sara" Challenges Truk

The Jap fleet definitely doesn't want to slug it out, even when a U.S. task force buzzes around the powerful naval base of Truk Island.

That's the opinion of Capt. John H. Cassady, USN, commander of the USS *Saratoga*, who took his giant carrier within striking distance of Japan's "Pearl Harbor" but was unable to lure the enemy fleet into combat.

For a ship which the Japs have "sunk" several times, the *Saratoga* proved a very lively ghost during her 12,500-mile tour of the Southwest Pacific in November. In 30 days the carrier's flyers shot down 25 Jap planes, probably downed 23 others, destroyed 24 planes on the ground, sank 2 warships, damaged 12 others, and strafed many more.

Captain Cassady detailed the operations of a carrier task force, which included the *Saratoga*, another smaller carrier, two cruisers and from four to twelve destroyers. This force raised havoc with Japanese shore installations and shipping from Bougainville to Tarawa, with sidetrips toward Truk as a decoy.

The month's action started 1 November, when the task force struck twice at Buka and Bonis, on the northwest shore of Bougainville Island. Two more attacks on the 2nd rendered the air-fields unserviceable, destroyed 8 to 10 Japanese planes on the ground, and silenced antiaircraft installations.

The next stop on its itinerary was the now-famous raid on Rabaul, major Jap naval base on New Britain Island. In the first air attack, on 5 November, the *Saratoga* launched 22 dive

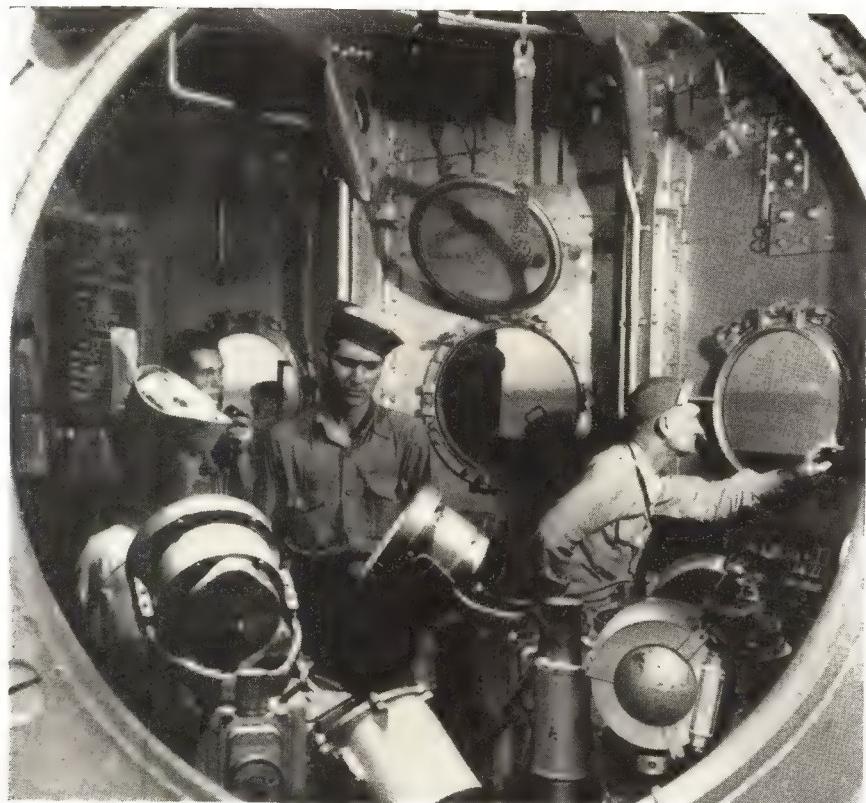


Figure 85. The Commanding Officer of the U.S.S. Saratoga watches the horizon through the porthole of the wheelhouse, enroute to raid a Jap base in the South Pacific.

bombers, 23 torpedo planes and 54 fighter escorts. To meet this attack the Japs sent up from 75 to 100 Zeros.

Instead of "breaking off and getting mixed up in dog-fights," Captain Cassady said, the young fighter pilots stuck to their assignment of escorting the dive bombers and torpedo planes. As a result, our losses were "surprisingly low" while the Rabaul harbor was left a shambles of smoking and wrecked cargo vessels and warships. Captain Cassady praised especially the fine work of enlisted rear-seat gunners in this action.

Six days later several other carriers teamed up with the *Saratoga* to give Rabaul another aerial plastering.

From Rabaul the task force steamed toward Nauru Island and gave it a dose of the same medicine by moonlight. In four concentrated attacks, two air strips were destroyed.

12C3. Task Force 58. How gigantic a task force may be, is illustrated by the following paragraphs taken from a 22 June 1944 Navy Department press release.

The existence of TASK FORCE 58, the most powerful and destructive naval unit in the history of sea warfare, which has just been engaged in the violent Battle of the Eastern Philippines of June 18 and 19, was revealed today. Composed of the latest and swiftest carriers, battleships, cruisers, and destroyers in the U. S. Fleet, TASK FORCE 58 has, in the first six months of its existence, reversed the direction of traffic in the Pacific Ocean.

So powerful is the protection afforded this force by the antiaircraft artillery of the escorting battleships, cruisers, and destroyers, that the entire Pacific Ocean to the gates of Japan is its stamping ground. Thus, it has become the most mobile strategic air force yet seen in warfare.



Figure 86. Air power has drastically altered the nature of modern warfare. Here we have a glimpse of aircraft cooperation during fleet maneuvers.

Since the occupation of the Marshall Islands in early February, TASK FORCE 58 has cleared a part of the way to Tokyo for the amphibious troops, by pummeling the formidable Japanese strongholds at Truk, Saipan and Tinian, Palau, Yap, Woleai, Truk (a second time), Marcus, Wake, Saipan and Tinian (a second time), and the Volcano and Bonin Islands, a mere 500 miles from Japan proper.

In addition to these strenuous duties, TASK FORCE 58 has furnished tactical support for the amphibious landings in the Gilbert and Marshall Islands campaigns, Eniwetok, General MacArthur's operation at Hollandia, and the recent invasion of the Marianas. But, with the sudden growth in the numbers of baby flat-tops, bringing Pacific Fleet carrier strength to nearly 100, these duties are falling to the smaller, slower carriers. Now TASK FORCE 58 is able to roam more freely on its strategic missions of reducing Japan's inner bastions and threatening the enemy homeland itself.

The huge armada first joined up immediately after the Marshall Islands occupation. Although the majority of its units had been operating as separate groups during both the Gilbert and Marshalls actions, this was the first time the entire force had been assembled as a single striking force. Under the command of Vice Admiral Marc A. Mitscher, U.S.N., TASK FORCE 58 proceeded almost immediately on its first crushing blow against shipping and shore installations in the Truk Atoll.

Just where this floating strategic air force will strike next is a constant source of conjecture and worry for the enemy. Its one and one-quarter million square feet of runway from which it can launch well over a thousand planes can be moved at will throughout the Pacific, even to Japan itself. Its installations and equipment can never be captured, and the cost of trying to destroy it can be measured by the results of the Battle of the Eastern Philippines. Its "strength in numbers" can be seen in the record of one of its recently returned fighter squadrons. That squadron, Fighting Five, destroyed 94 enemy aircraft in the air with a loss of one of its own.

Under the protection of its own fighters, TASK FORCE 58 can send its battleships, cruisers, and destroyers within range of enemy shore installations as was done recently at Ponape, and pummel them with more than 850 large-bore rifles which range in size up to the largest coastal defense guns. This artillery alone is equal to 70 standard Army field artillery units.

Also solved is the problem of supply, always difficult with ships operating thousands of miles from their home base. Now TASK FORCE 58 is able to carry its fuel, food, replacement aircraft and pilots wherever it goes. Operating as a tail-end group in the force, this "train" has its own carrier protection, its own cruisers and destroyers for antiaircraft.

D. WARTIME ACTIVITIES

12D1. General. The nature of this war has called forth numerous activities that had not been fully incorporated in the fleet organization prior to December 1941. Certain of these activities and services are discussed in the following paragraphs.

12D2. Armed Guard. Protection of merchant shipping has been one of the major problems of this war. The Navy's answer to this problem has been the placing of trained Navy gun crews, the Armed Guard, aboard merchant cargo vessels, tankers, and troop transports to provide protection from enemy submarines, aircraft, and surface raiders. The Armed Guard program actually went into effect when Japan attacked on 7 December, 1941, but the groundwork had been laid many months earlier in Washington when it seemed inevitable that this country would be drawn into the war. Since that time, the Armed Guard service has become one of the largest activities of the Navy and its crews have served in all quarters of the globe.

12D3. Construction Battalions. For some months before the Japanese attacked Pearl Harbor we had been strengthening our insular outposts in the Pacific by construction of various fortifications. When these islands were attacked, the construction was only partially completed, and the civilians who were employed there by various construction companies were subjected to attack,



Figure 87 Venied in mosquito netting to fend off insects bearing malaria germs. Seabees build a road at a South Pacific base.

along with our garrisons of Marines. In that situation, the civilians were powerless to aid the military forces present because they lacked the weapons and the knowledge of how to use them. Furthermore, they lacked what little protection a military uniform might have given them. As a consequence, the Navy Department decided to establish and organize naval construction battalions whose members would be not only skilled construction workers but trained fighters as well.

Construction Battalions authorized and trained. On 28 December, 1941, authorization was obtained for the first contingent of "Seabees" (the name taken from the words "Construction Battalions"). Experienced men representing about 60 different trades were enlisted in the Navy and given ratings appropriate to the degree and type of their civilian training.

These men were sent to training centers where they were given an intensive course in military training, toughened physically, and, in general, educated in the ways of the service. Particular attention was paid to their possible employment in amphibious operations. Following their initial training, the Seabees were formed into battalions, so organized that each could operate as a self-sustained unit and undertake any kind of base-building assignment. They were sent to advance base depots for outfitting and for additional training before being sent overseas.

Activities. In the Pacific, where the distances are great and the expeditious construction of bases is frequently of vital importance, the work accomplished by the Seabees has been of invaluable assistance. Furthermore, the Seabees have participated in practically every amphibious operation undertaken thus far, landing with the first waves of assault troops to bring equipment ashore and set up temporary bases of operation.

In the Solomon Islands, the Seabees demonstrated their ability to outbuild the Japs and to repair airfields and build new bases, regardless of terrain or weather conditions encountered. Other specialized services performed by the Seabees include the handling of pontoon gear, the repair of motor vehicles, loading and unloading of cargo vessels. There is practically no type of construction job that the Seabees have not, on occasion, undertaken and carried through to completion with remarkable skill and efficiency, even in the face of seemingly insurmountable obstacles.

12D4. Amphibious operations. Amphibious warfare is a development of World War II. The amphibious force is a new force, with new ships and weapons, new techniques, new methods. Perhaps the only old thing about the amphibious force is the basic idea of invasion attack. That idea runs through the history of warfare.

In former times, the only way to land on a hostile beach was by the use of open wooden boats. Until about 30 years ago, a steam launch towed a string of cutters close to the beach under protection of warship gunfire. The cutters then cast off and used oars to go in through the surf. The fighting men waded ashore with rifles and a small supply of ammunition. Later on there were large, clumsy,



Figure 88. The Navy's Armed Guard crews are the "bodyguard" of the merchant marine.

wooden, motor-sailing launches, with one-pounder cannon mounted in the bows, but Marine and Navy officers believed it impractical to attempt to storm an enemy beach with them.

During the last war, British troops made a seaborne invasion at the Dardanelles. Elaborate plans were made to land a large number of men in a short time by means of ramps dropped from transports to barges, but enemy artillery upset the well-laid plans.

The amphibious forces in operation may include personnel from nearly every branch of the armed forces. Under the same unified command the Navy and Army, in many a World War II amphibious operation, have integrated the services of the Marine Corps and the Coast Guard, together with the Air Corps in their plan of attack.

The duties of amphibious force personnel are too numerous to list in detail. A list of some of the schools which train men for these duties will give some idea of their scope: Transport Quartermaster School, Steward's Mate School, Naval Gunfire Support School, Communication School, C.I.C. School, Scout and Raider School, Air Liaison School, schools for training crews to handle the larger landing craft, such as the LST's and the LCI's, schools for night lookout training, and a night vision "maze" course. The latter is a dimly lighted obstacle course, consisting of sandbags, suspended ropes, water to be crossed on stones, steps of varying heights, "shin-busters," posts with small electric charges, etc.

The amphibious forces have taken part in every United States invasion of enemy lands to date. The importance of their contribution to the war is grasped when it is realized that wherever United States troops have fought, it has been necessary to cross the ocean, invade, and seize the very battlefields on which to fight the enemy. The phrase, "a beachhead was established," means the successful completion of an enormously complicated task. A naval barrage has softened enemy defenses. Transports have been unloaded under hazardous conditions. Troops have been landed, kept supplied with guns, ammunition, food, water, communications equipment, and other materials. The landing of equipment after the first surprise attack, has been achieved under heavy fire. In all these operations, the amphibious forces have played their part under every possible condition of wind, water, and weather.

Amphibious Medicine. Because 1943-44 was a year of invasions, the predominant problem in caring for the health of the men in the Navy was the task of taking medical care into beachheads.

The solution was the creation of amphibious medicine. The Navy evolved a chain of medical facilities reaching from the corpsmen on the beachhead to aid stations, to field hospitals, thence to special hospital ships, and finally to fleet and advance base hospitals. Through this chain of medical care marines and Navy men wounded in combat moved to safety with such success that, out of every 100 wounded men, 98 recovered.

12D5. Advance base units. Early in the war the Navy undertook a large expansion of its system of advance bases, many of which represented the con-



Figure 89. Supplies pour into Iwo Jima beachhead.

solidation of gains made by combat units. Depending on the circumstances, that is to say, whether they were gained as a result of a raid or as a result of an advance, the permanency of their construction was varied to meet the situation. In the South and Central Pacific, the entire campaign thus far has been a battle for advance bases where we can establish supply ports, ship repair facilities and landing fields, to act as a backstop for a continuing offensive.

Advance bases range in size from small units for the maintenance or repair of PT boats, manned by a handful of officers and men, to major bases comprising floating drydocks, pattern shops, foundries, fully equipped machine shops, and electrical shops, staffed by thousands of specialists. Some of these bases are general purpose bases; others are established for a special purpose. Convoy escort bases, located at terminals of the convoy routes, provide fuel, stores, ammunition, and repair facilities for merchant ships and their escort vessels. Rest and recuperation centers afford naval personnel facilities for relaxation and recreation after they return from combat zones. Air stations provide the facilities of an aircraft carrier on an expanded scale.

Once bases are built, they must be maintained. The problem of supplying the Navy's worldwide system of advance bases is one of great complexity, requiring a high degree of administrative coordination and attention to the most minute detail. Food, clothing, fuel, ammunition, spare parts, tools, and many types of special equipment must be made available in sufficient quantities and at the proper times to maintain the fighting efficiency of the Fleet.

In view of the difficulties involved, the arrangements made for the procurement and distribution of supplies to advance bases have been extremely effective. New methods have been improvised and shortcuts devised to simplify procedures and expedite deliveries. Among other devices adopted is the mail order catalogue system. Through use of the Navy's "functional component catalogue," it is possible to order all the parts and equipment needed to set up any type of base, from a small weather observation post to a fully equipped airfield or navy yard.

As our forces advance, new bases must be established and economy of personnel and material demands that this be accomplished largely by stripping the old bases that have been left behind as the front is extended. This process is known as "rolling up the back areas."

12D6. Naval mobile hospitals. Naval mobile hospitals were developed shortly before the war. These are complete units, capable of handling any situation requiring medical attention. Each unit originally contained officers of the Medical Corps, the Dental Corps, the Hospital Corps, the Nurse Corps, the Supply Corps, the Civil Engineer Corps, and the Chaplain Corps, and in addition, enlisted personnel of a wide variety of non-medical ratings such as electricians, cooks, and bakers. Mobile hospitals are organized and commissioned, and being mobile as the name implies, are placed under the orders of the Commander in Chief, United States Fleet, for such duty as may be deemed desirable, the same as a ship. These mobile hospitals have proved invaluable in all theaters.



Figure 90. Navy doctors and corpsmen at an aid station on Iwo Jima administer plasma and whole blood to wounded marines.



Figure 91. Medical corpsmen carry a patient into Mobile Base Hospital receiving room from a field-type ambulance.



Figure 92. The Naval Air Transport Service flies patients back from distant fronts. In the picture above a Navy nurse superintends the removal of a stretcher case.

12D7. Naval Air Transport Service. The Naval Air Transport Service (NATS) provides air transportation necessary to meet the needs of the Naval Establishment and ferries aircraft for the Naval Establishment. It has done outstanding work in flying Navy wounded and ailing back to the United States from distant fronts. Through Naval Air Transport commands, the Naval Air Transport Service supervises the air transport squadrons operating scheduled air transportation and such special flights as may be required. Through the Naval Air Ferry Command, it supervises the air ferry squadrons and service units. It prepares the *Naval Air Transport Service Manual and Planning Manual*. The Naval Air Transport Service maintains liaison with other divisions of Operations, the bureaus of the Navy Department, and other activities in connection with the construction, improvement, and development of base facilities to support air transport and air ferry operations; maintains liaison with the Aviation Personnel Division and with the Bureau of Naval Personnel in connection with Naval Air Transport Service personnel; maintains liaison with Headquarters, Army Air Transport Command; maintains liaison with other divisions of Operations, and the various bureaus of the Navy Department regarding matters affecting the ferrying of naval aircraft, and maintains liaison with the Bureau of Aeronautics on matters relating to transport aircraft design, engineering, maintenance, and performance. It establishes, supervises, and administers regulations relating to priorities for passengers, cargo, and mail, and establishes and supervises schedules and traffic rules. The Service is responsible for the coordination of training programs for flight and operations ground personnel in the Naval Air Transport organization. It has cognizance of all matters arising in connection with the administration of the Navy's contracts with commercial air carriers for air transport services.

12D8. Naval Transportation Service. The Naval Transportation Service operates merchant type dry cargo, tanker, and passenger vessels in logistic support of the Fleet and its advance bases; prepares advance plans for the Naval Transportation Service and allocated ships and for initial overseas movements; processes priorities for transportation of cargo and personnel in the Pacific Ocean; coordinates all fuel problems of fleets and bases; administers the port director's organizations and development of port services to Naval Transportation Service vessels; arranges Navy towing requirements with the War Shipping Administration; arranges for transportation of incoming personnel; and procures merchant type vessels over 1000 gross tons for naval auxiliaries.

13

SECURITY OF NAVAL INFORMATION

A. IMPORTANCE OF INFORMATION TO ENEMY

13A1. General. The word "security," like many other words, has several meanings. As it is used in this chapter, however, it has only one meaning—"Safeguarding information." "Information," as we are now using it, has limited and definite significance. It means facts and data that the enemy desires to know about our various activities. None of us who aspire to wear the blue uniform would knowingly assist the enemy in any way. Nevertheless, there have been some regrettable instances in which the enemy has obtained information because those involved did not truly understand and appreciate just what constitutes information of interest to the enemy.

13A2. Data desired by enemy. Before we proceed any further, let us consider some definite examples of the type and kinds of material the enemy expects his agents to obtain. It takes no argument to demonstrate that information about convoys, and ordnance, and airplanes should not be revealed. Most people grasp the significance of such data. But what so many people do not realize is the fact that the enemy is interested in obtaining that which, to the average person, appears to be general and harmless information. In order that you may see the breadth and scope of the enemy's interest, there follows a partial listing of definite questions the answers to which enemy agents operating in this country were instructed to obtain. These questions have been taken from our own official files so there can be no doubt as to their authenticity.

1. What is the situation with respect to manufacture of steel plates covered with rubber manufactured by the U. S. Rubber Company? How many sheets of steel and how many sheets of rubber do the plates contain? What is the total thickness of the plate? Is the exterior sheet rubber or is it steel?
2. What is the daily production of shells by the Bethlehem Steel Corporation?
3. What foodstuffs, raw material, and machines are being sent to England?
4. What manufacturing plants are operating branches in Canada, Australia, and New Zealand?
5. How many American pilots are being turned out monthly by the Army?
6. What products does the Remington Rand Corporation manufacture in its new plant at Denver?

Just a little bit of careless and more or less innocent talking would furnish the answers to any of these questions. How easy it is, unthinkingly, to disseminate information along these lines is indicated by the following incident:

A public utility company of an eastern state, apparently motivated only by a desire to gain public goodwill by advertising its war effort, recently proposed to release some advertising in which was recorded the fact that the company had done much work in connection with the plant expansion of a certain aircraft company. More specifically, it was pointed out that a new electric sub-station had been constructed at a specific point, in order to give the company additional electrical facilities.

No imagination is required to appreciate the usefulness of this bit of information to an enemy saboteur. In this particular instance, the company deleted the information when the seriousness of the situation was brought to its attention by the Department.

Here is a set of questions that one agent was undertaking to answer.

1. What new war material factories are being constructed?
2. Where are these plants located?
3. When will they begin to function or make deliveries?

Apropos of these specific inquiries there comes to mind a recent United Press release by a writer who had escaped from occupied territory. In his article, the writer recalls his astonishment at an incident which took place on a train on which he was a passenger in the Detroit area.

"Coming into Detroit from the West," he writes, "a group of us who were immersed in reading or chatting were startled when one passenger called out 'Look! There's that big new bomber plant!' A state highway running near this gigantic midwestern bomber plant had been blocked and detoured. But the helpful passenger made sure all of us got the only close-up—from the train, which runs closer to the plant than any public road."

Another question:

Where are there concentrations of Army supplies?

It is again appropriate to quote from the article to which reference has just been made:

"Riding from Cincinnati to Cleveland, I was reading a book when the porter called to me 'Look at those flat cars loaded with Army stuff!' By looking quickly between the boxcars on the siding we were passing, I could see a long row of green Army machinery standing on flatcars on a more distant siding. A German saboteur probably would have missed them because of the boxcars, if he didn't have a helpful porter."

We have been talking about more or less non-professional information. Suppose we now take a look at a few items that come a little closer to home. These incidents, too, are actual and have been selected from official records. Note the scope of the information and the fact that it comes from all sources and covers a great variety of subject matter and situations.

It is a matter of public information that, *prior* to the arrival of American troops in Iceland, a carefully guarded military secret was brought to the attention of the reading public. The potentialities of that situation and the thoughtlessness of those responsible for the dissemination of the information leave one aghast.

Some time ago a legitimate visitor in a naval installation escaped the attention of the sentries, and, apparently motivated only by curiosity, observed the activities in progress. Later, he described his observations to others in general conversation.



Figure 93. Fate of this tanker, might be due directly to a thoughtless remark spoken in a friendly conversation.

Within comparatively recent times a merchant seaman on an oil tanker revealed the fact that the tanker was to sail to Russia from a specific pier on a certain date and that part of its cargo was antiaircraft material.

Another seaman passed on the information that he was taking a course in the use of the Sperry Gyroscope; that this course would last for 10 days, which would just give him time to join up with the next convoy at a specific point.

The next instance is a complete drama. A lady in Richmond was told the name of a British ship on which some British officers were to return home. They never reached home. This ship was torpedoed.

A Movietone operator reported to the Navy Department that on the Cape Charles ferry, simply by listening to the conversation of the officers and employees in the Norfolk area, he had acquired information as to the number, names, and types of ships present in Hampton Roads, including approximate sailing dates.

Officers and enlisted personnel returning from theaters of war should contact the nearest public relations officer before committing themselves to cooperate with any publicity media. What might appear to be harmless, interesting information from the war zones may be just the type of thing the enemy is eager to know. Therefore it is imperative that returning naval personnel do not participate in any press conference, talk to reporters, or talk over the radio, except after clearance of the subject matter by a public relations officer.

13A3. Who should have information. Now that we have seen the types of information that the enemy is seeking and have noted incidents or disclosures which would aid them in securing it, it is time to consider individual responsibility. In the Navy, each of us has the duty of doing certain things. These are things which no one else can do for us. In the first place, the fact that a man wears the Navy uniform does not entitle him to know Navy secrets. Each one is entitled to know only the things which are necessary in the performance of the particular duties that are assigned to him. If a certain job does not necessitate acquiring information of a confidential or secret character, effort should be made to avoid coming into possession of such knowledge. What does it profit any member of the naval service to acquire confidential or secret information? To be in possession of such data, if it is not required for an assignment, is a positive liability. It cannot advance the interest of the Navy, and it can only jeopardize the possessor. Seasoned and experienced naval officers avoid secret and confidential information not necessary for their tasks as the ordinary person avoids the plague.

The use of the terms "secret" and "confidential" brings us to the subject of classified material. Admiral King is not only the Commander in Chief of the U. S. Fleet but in addition he is the Chief of Naval Operations. In this latter capacity, he is charged with general cognizance of matters of security. In order to provide for the proper indoctrination of all personnel charged with responsibility for safeguarding classified material, he issues such instructions as he deems necessary for the proper administration of the security system prescribed by *Navy*

Regulations. The Office of Naval Intelligence functions in a staff advisory capacity as a representative of the Chief of Naval Operations in the administration of this security system, and the Director of Naval Communications is responsible for the security of all naval communications.

Now, in the development of a sound security policy, cognizance must be taken of the fact that practical security must necessarily differ from the ideal of positive secrecy in that modifying factors are involved. After all, information must be disseminated. It cannot be kept within the knowledge of one or two persons. Otherwise, it would generally be useless. So it is that great attention is given to the means and methods of disclosing and transmitting classified material.

B. CLASSIFICATION

13B1. Categories. Information which must be limited in its distribution, and in some cases its very existence concealed, is called *classified matter*. Information about future operations or new equipment is more valuable to the enemy than aerial photographs of territories under our control but remote from operational theaters. Classified matter is therefore divided into categories, according to the number of persons who may be permitted to see it and the precautions which must be taken in handling it. These categories are listed and defined in Article 76, *Navy Regulations*, as follows:

Top secret. In the United States *top secret* is regarded as a subdivision of *secret*. It consists of certain secret documents, information, and material, the security aspect of which is paramount; unauthorized disclosure would cause *exceptionally grave damage to the nation*. The following are examples:

1. Plans or particulars of future major or special operations.
2. Particulars of important dispositions or impending moves of our forces or convoys in connection with (1) above.
3. Very important political documents dealing with matters such as negotiations for alliances and the like.
4. Information of the methods used or success obtained by our intelligence services and counter-intelligence services, which would imperil secret agents.
5. Critical information of new and important munitions of war, including approved scientific and technical developments.
6. Important particulars of cryptography and cryptanalysis.

Secret. Documents, information or material, the unauthorized disclosure of which would endanger national security, *cause serious injury to the interests or prestige of the nation*, or any governmental activity thereof, or would be of great advantage to a foreign nation, are classified *secret*. The following are examples:

1. Particulars of operations in progress.
2. Plans or particulars of operations not included under *top secret*.
3. Instructions regarding the employment of important new munitions of war.
4. Order-of-battle information, location, and moves affecting the order of battle.
5. Knowledge of enemy material and procedure, the value of which depends upon the enemy not knowing that we possess it.

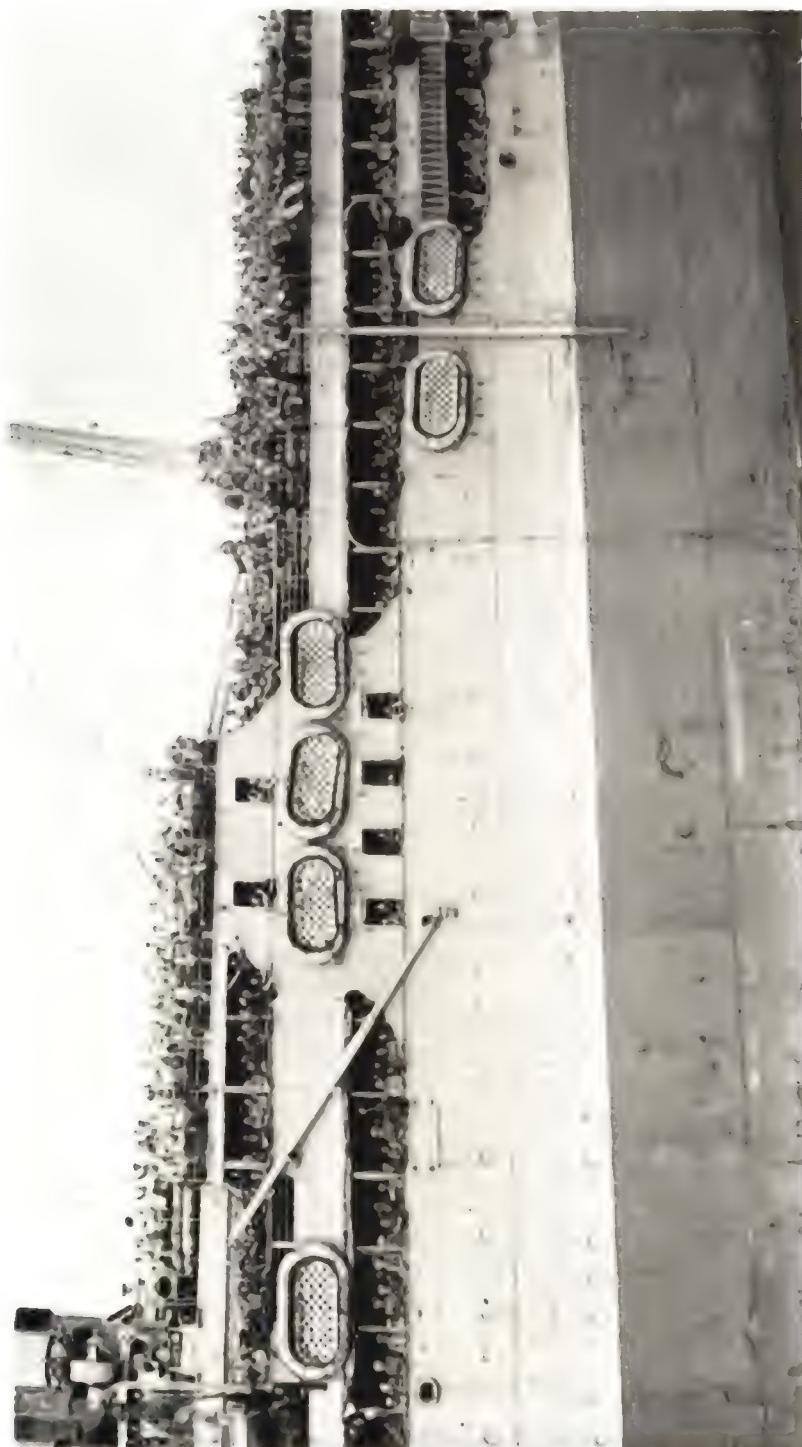


Figure 94. Absolute reticence concerning all naval information insures safe arrival of troop transports.

6. Vital military information on important defenses.
7. Certain reports of operations containing information of vital interest to the enemy.
8. Adverse reports on general morale affecting major operations.
9. Important improvements to existing munitions of war until accepted for service use.
10. Photographs of vulnerable points or vital installations under our control.
11. Certain development projects.
12. Important cryptographic devices, unless assigned to a lower category.

Confidential. Documents, information, or material, the unauthorized disclosure of which, while not endangering the national security, would be *prejudicial to the interests or prestige of the nation*, any governmental activity, an individual, or would cause administrative embarrassment, or difficulty, or be of advantage to a foreign nation, are classified confidential. Certain examples may be cited as follows:

1. Matters, investigations, and documents of a personal and disciplinary nature, the knowledge of which it is desirable to safeguard for administrative reasons.
2. Routine operational and battle reports which do not contain information of vital interest to the enemy.
3. Routine intelligence reports.
4. General military radio frequency allocations.
5. Military call signs, unless so assembled that they reveal the order of battle.
6. Meteorological information of designated areas.
7. Unit movements of non-operational significance in areas within or adjacent to operational theaters.
8. Certain technical documents and manuals used for training, maintenance, and inspection of important new munitions of war.
9. General tactical lessons learned as a result of operations.
10. Aerial photographs of territories under our control in or adjacent to operational theaters.

Restricted. Documents, information, or material (other than top secret, secret, or confidential) which should not be published or communicated to anyone except for *official purposes* are classified restricted. The following are examples:

1. Information of moves of non-operational significance in areas remote from theaters of war.
2. Training and technical documents for official use only or not intended for release to the public.
3. Certain routine documents relating to supply and procurement.
4. Aerial photographs of territories under our control remote from operational theaters.
5. Photographs of enemy, enemy occupied or dominated areas, except those which reveal secret sources.
6. Strength returns of units remote from operational theaters.

13B2. Responsibility for determining classification. The originator of a new device, a message, a letter, a report, or a document of any kind is responsible for labeling it "top secret," "secret," "confidential," or "restricted" if it falls within one of the definitions above. He must avoid the common tendency toward overclassification. Through the necessary steps of preparing the material, typing or printing, and distribution, the same degree of security is necessary that will be accorded the completed document, letter, or report when it is distributed.

Each document is classified according to its content and not necessarily according to its relation to another document. The same is true of *extracts* from classified documents.

13B3. Markings of classified matter. Documents which are classified as top secret, secret, and confidential are so marked on every page. Documents classified as restricted are so marked on the cover and on the title only. Loose-leaf restricted matter is so marked on each page.

Except while in the process of local distribution in the custody of persons authorized to handle such matter, top secret, secret, and confidential documents shall, while in transit, be placed in double wrappings, or envelopes. The inner covering shall be plainly marked or stamped "top secret," "secret" or "confidential." The outer covering shall bear the address only and shall not, under any circumstances, contain anything whatsoever to indicate the secret or confidential nature of the contents.

13B4. Special kinds of classified matter. Two types of classified matter, namely registered publications and classified messages, receive somewhat more careful handling than would other material of the same classification, and extra precautions are taken to safeguard them.

1. *Registered publications.* These include ciphers, codes, and classified instruction booklets for apparatus and material. Each copy of such publications has a short title and register number. Accurate accounting and periodic inventories establish the location of each copy at all times. Neither copies nor extracts can be made without permission. Most registered publications are secret or confidential. Handling, transporting and accounting for them is regulated by the *Registered Publications Manual*, which supplements the rules for ordinary classified matter.

2. *Classified messages.* Many officers and enlisted men do not realize that most classified messages are *encrypted*, that is, "wrapped up" in a cipher, a code, or both, before transmission by rapid means.

Messages which are to be encrypted, or exact plain-language transcriptions of messages which have been encrypted, must be handled with especial care because a single such message in the hands of the enemy might make it possible for him to read every message sent in the cryptographic system that the message represents.

The number of copies which may be made is therefore severely limited. The code copy and the exact transcription must never be filed together, and other

precautions are taken. The same applies to paraphrases and approximate transcriptions.

C. DISCLOSURE

13C1. General. It is obvious that the distribution and dissemination of secret matter should be confined to the absolute minimum and reserved exclusively for the *official* use of the persons to whom it is divulged. Officers by virtue of their commission alone are not authorized to have knowledge of top secret, secret, and confidential matter.

Top secret and *secret* matter may be disclosed only to those persons in the government service whose official duties require such knowledge. *Confidential* matter may be disclosed to persons in the government service who must be informed, and to other persons therein, when, under special circumstances, such disclosure is to the interest of the Navy. *Restricted* matter may be disclosed to persons of discretion in the government service when it appears to be to the interests of the Navy and the public.

D. TRANSMISSION

13D1. Methods. *Top secret* messages shall be transmitted using the highest grade cryptographic systems available. Top secret documents will be transmitted only by officer messenger or officially designated courier in double sealed envelopes, the inner one being marked *top secret*. Under no circumstances will such matter be transmitted by registered mail.

Secret documents are transmitted in the custody of officer messenger. Under extraordinary circumstances, when it is essential that secret documents, except secret registered publications, be delivered with the least possible delay, they may be transmitted by Registered Guard Mail or U. S. registered mail within the continental limits of the United States. For transmission to or from points outside the continental limits of the United States, when officer messenger is not available, secret matter may be transmitted by ONI pouch, Registered Guard Mail, or U. S. registered mail.

Confidential matter may be transmitted by U. S. registered mail or Registered Guard Mail when available or by officer messenger or courier.

Restricted matter may be transmitted by such approved channels as will provide a reasonable degree of security.

E. PERSONAL RESPONSIBILITY

13E1. Rule for care. Persons to whom top secret, secret, and confidential documents are entrusted or charged shall at all times be held personally responsible for safeguarding them and their contents. Likewise, persons who have received top secret, secret, or confidential documents on custody receipt thereby become personally responsible for the safeguarding thereof. Such documents shall not be taken away from the ship or station to which issued, by officers who may be detached. Top secret, secret, or confidential documents should not be



Figure 95. Security Poster.

taken home for study as the possibility of loss or compromise is greatly enhanced whenever such documents are out of naval jurisdiction.

Any person having knowledge or suspicion that secret or confidential matter has been lost or compromised will immediately report the fact to his Commanding Officer.

And now, for just a moment, before we conclude, let's get away from the technicalities of the regulations and go back to actualities. Anyone who has been

assigned duty which necessitates travel overseas understands only too well the need for security of vital information regarding sailing dates and locations of ports of embarkation. While en route, he hopes and prays that no one has divulged any information about his ship, its whereabouts, and its strength. He wants to feel sure that no information regarding his ship has been given out which may give the enemy any advantage. Such security can be felt by him only if every individual in the Naval Establishment is mindful at all times of the need to keep every item of information, however unimportant, from reaching unauthorized persons.

14

THE NAVAL INTELLIGENCE SERVICE

A. PURPOSE

14A1. Introduction. Intelligence may be defined as the collection, evaluation, and dissemination of information. These three steps, collection, evaluation, and dissemination, form the basis of the work performed by the Naval Intelligence Service. *Collection* of information is accomplished by a world-wide network strategically located for this purpose. *Evaluation* is the critical analysis of information to determine its credibility and accuracy, its significance, its relevance and importance, and finally to determine the conclusions to be drawn from it. Information subjected to this process becomes intelligence. *Dissemination* consists of assuring that intelligence reaches the person who can use it in time to serve its purpose.

The mission of the Naval Intelligence Service, then, is to collect, evaluate, and disseminate intelligence; to deny to the enemy information of our own forces; and to combat espionage, sabotage, and subversion in the Naval Establishment.

The Naval Intelligence Service includes the Office of Naval Intelligence, a division in the Office of the Chief of Naval Operations; the intelligence organizations in the Naval Districts; naval attachés and other intelligence officers abroad; and intelligence officers with the operating forces.

14A2. Historical. The Office of Naval Intelligence was created 23 March 1882. In that year the Secretary of the Navy, in his annual report, stated "An office of intelligence has been organized for the purpose of systematizing the collection and classification of information . . . in relation to the strength and resources of foreign navies."

In order to carry out the announced purpose of collecting and classifying information concerning the strength and resources of foreign navies, there was inaugurated the practice of sending naval attachés to foreign countries. This practice, which has been continued and expanded, will be referred to in more detail in the discussion of the foreign activities of the office. During the war with Spain, and in the first World War, the Office of Naval Intelligence operated very effectively.

Based on this past experience, and as a guide for the future, the Secretary of the Navy on 10 May 1933 promulgated a naval information policy. In a revision of this policy on 23 July 1940, the Naval Intelligence Service is directed:

To acquire accurate information concerning the political, military, naval, economic, and industrial policies and activities of all countries.

To analyze and preserve information for ready reference and for historical purposes.

To disseminate useful information systematically throughout the naval service and to other Government Departments and agencies.

To provide protection against espionage and sabotage in cooperation with other departments and agencies.

To keep the public informed of the activities of the Navy, as compatible with military security.

During the year 1941, the task of keeping the public informed of the activities of the Navy was removed from the Office of Naval Intelligence and assigned to Public Relations, which is now a separate activity under the Secretary's Office.

B. ORGANIZATION

14B1. Offices. The Naval Intelligence mission is accomplished through the activities of the Office of Naval Intelligence in Washington; the district offices, which are located in the various naval districts; the foreign offices, which have been established in strategic foreign locations; and the operating forces. While the offices in the field are not exact replicas of the central office in Washington, they parallel it sufficiently so that, for the purpose of this discussion, the general organizational picture can be sensed from a description of the way the office in Washington functions. Basically this office or division is divided into groups. Without going into minute detail, the duties and functions of these various groups are discussed in the sections which follow.

14B2. Services Group. As may be understood from its title, the general purpose of this group is to perform service functions for the Office of Naval Intelligence. To carry out this purpose, the group is divided into various sections which deal with matters such as civil service personnel, naval personnel assigned to intelligence duties, files, mail and dispatches, registered publications, equipment and supplies, budget, space, drafting and duplications, translation of foreign languages, legal matters, and training courses for intelligence personnel.

14B3. Counter-Intelligence Group. At this point it is desirable to differentiate between the term "Intelligence" and "Counter-Intelligence." Perhaps the simplest way to explain it is to say that "Intelligence" is "information that we desire or need about the enemy." Then the term "Counter-Intelligence" may be defined by saying that it "consists of our efforts to prevent the enemy from obtaining information that it desires or needs about us."

Counter-Intelligence activities, designed to prevent the enemy from obtaining information it desires or needs about our Navy, are performed by the Counter-Intelligence Group whose functions are: (1) to obtain pertinent information pertaining to enemy agents and enemy sympathizers whose purposes are inimical to the Naval Establishment; (2) to evaluate the information thus collected; and (3) to disseminate information of value to the Naval Establishment and to other interested governmental agencies.

Briefly, this may be accomplished by the following four methods:

1. By close liaison with law enforcement agencies and other departments of the Government, which, in the exercise of the functions with which they are

charged by law, obtain much information on the movements and activities of aliens and others within the United States as well as those arriving and departing.

2. By establishing naval censorship regulations to prevent leakage of information from within the Naval Establishment, and security policies governing access to such information from without.

3. By assuring, through investigations and checking processes, that persons within the Naval Establishment are loyal.

4. By carefully scrutinizing and evaluating information and reports obtained from all possible sources, to determine the means and methods used by the enemy in his efforts to learn about, or interfere with, our naval war effort.

14B4. Intelligence Group. The Intelligence Group is responsible for the collection, evaluation, and dissemination of matters dealing with foreign countries, their fleets, aviation, etc. As might be expected, the purpose is to gather information of interest to the Naval Establishment. The Intelligence or "Foreign Group" has three separate branches: the Intelligence Branch, the Publications and Distribution Branch, and the Special Activities Branch.

1. *Intelligence Branch.* The Intelligence Branch has as its mission the following:

- (a) To secure all classes of pertinent information concerning foreign countries, especially information affecting naval and maritime matters.
- (b) To evaluate the information collected and to disseminate it as advisable.
- (c) To direct the activities of United States naval attachés.
- (d) To maintain liaison with naval missions.
- (e) To maintain liaison with foreign naval attachés accredited to the United States.
- (f) To maintain liaison with other governmental departments of the United States for the exchange of foreign information.

In time of war, it is necessary that every endeavor be made by Intelligence to obtain information concerning the movements of enemy naval forces that have been made or contemplated; the arrival and departure of enemy war vessels from any port; the location of new enemy naval bases; the damage, loss, or destruction of any enemy vessel; the construction of any new enemy war vessel; the location of enemy submarine bases and enemy mine fields.

Not all information on enemy countries comes from abroad. A constant flow of materials is maintained from persons and institutions here in North America. Photographs and descriptions of all sorts are forthcoming from travelers; from companies in the engineering, banking, and oil business; and also from numerous professional geologists, anthropologists, and faculty men who are intimately acquainted with foreign areas from which it is difficult to procure information at present.

In addition to the foregoing, Naval Intelligence provides a fairly large group of officers for Combat or Operational Intelligence duties at sea and with naval forces in foreign areas. Such duties consist mainly of maintaining a situation chart of enemy and friendly forces, briefing Commanding Officers of combatant

vessels and planes, particularly patrol craft, upon their departure on missions, and interrogating them to acquire intelligence upon their return. Appropriate operational intelligence reports are prepared; information necessary to the operating forces is evaluated; and all intelligence is collected which is needed by the operating forces at that particular location.

2. *Publications and Distribution Branch.* A great deal has been said about collection and evaluation of materials. It should be noted that everything worthwhile, after evaluation, is sent to the place or places where it will do the most good. For example, one section in the Publications Branch collects the action reports from Commanding Officers after a battle and works them into a battle narrative form which is available to all officers concerned; it publishes a weekly confidential magazine covering progress of the war in all theaters and also includes timely information on new developments of professional interest. It is designed primarily for service to the forces afloat and in forward areas, and is delivered by air wherever practicable.

Another section in this branch is charged with maintaining complete information on design and characteristics of all surface ships. It prepares manuals and handbooks which are distributed to and become standard equipment of all naval ships and stations.

Still another section prepares and distributes information calculated to aid in the strategic planning of the Navy. As a final unit, a Graphic Section assembles, evaluates, and files all available pictorial, graphic, or map materials for foreign fields, keeps them available for immediate inspection and disseminates duplicates to the naval service and other military departments. Materials collected in this country are processed and distributed to the field. This section has on file all pertinent photographic negatives from Army, Navy, and other governmental agencies. A two-way flow of material is thus constantly maintained.

3. *Special Activities Branch.* The principal activities of this branch include cognizance of captured enemy personnel and equipment other than aeronautical equipment.

14B5. Air Intelligence Group. The fourth major division of the Office of Naval Intelligence is the Air Intelligence Group, which includes officers specially trained in Air Combat Intelligence, Photo Interpretation and Terrain Models, and Air Technical Analysis, the examination of captured enemy aircraft.

An Air Combat Intelligence School was established at Quonset Point, Rhode Island, in February of 1942. Reserve officers have been trained for Air Combat intelligence work, and have been sent out to the Fleet, to shore bases and to special assignments in the United States and overseas. Air Combat Intelligence officers serve with all Navy squadrons, afloat and ashore.

The courses given include, among others, intelligence procedure, plane and ship recognition, sources of intelligence material, navigation, fundamentals of air tactics, aerology, and geography.

The Air Technical Analysis officers either are, or will be graduates of ACI School at Quonset, and will receive supplemental training in crash intelligence

at the Air Technical Analysis Center at Anacostia. Photo Interpreters have received special schooling at Anacostia.

The Air Intelligence Group originates material and sends it out to the Fleet. In addition, it receives information from innumerable sources, reviews it, and feeds out vital data to fliers in training in the United States through Air Combat Intelligence officers assigned to training commands, to Navy Department chiefs and sub-chiefs vitally interested in such information, and to commands overseas which otherwise would be unable to obtain such data as swiftly as it is thus interchanged.

As speed is essential (if the flier who is going into combat is to have the latest information, the best available material on targets, enemy tactics and the like), there must be sub-centers which feed out spot information and intelligence material to the Air Combat Intelligence officers on carriers and at far-off bases. Such centers were established early and have carried out this important function. Every effort is made by Air Combat Intelligence officers to make sure that the commands to which they are attached be it a combat squadron or training squadron, staff or ship or other unit, get the information they need to do the best possible job, and get it swiftly and accurately.

The Air Combat Intelligence officer's prime job in a combat theater is to help in the briefing of fliers for a combat mission, and to interrogate them after the engagement or strike. He must pore over photographs with Photo Interpreters to determine the location of antiaircraft positions, prominent buildings and what may be in them, the construction of plane revetments and what kind of bombs will do the most damage to them and the planes they protect. The Photo Interpreters, specially trained for their work, now are assigned to ships and shore billets in combat areas so that there can be immediate interpretation of photographs taken by our photographic planes in order that the latest information on enemy targets may be available. The Photo Interpreter is an important member of any staff in a combat area.

For attacks on a specific target the Air Combat Intelligence officers use models and photographs, plus outline blowups, to show the target. Even on carriers, an expert model maker works with the Air Combat Intelligence officer, preparing a scale target model. Most recent photographs are enlarged, then further blown up with the use of a balaoptic so that the pilots can see the prospective target. When the fliers return from the strike, the Air Combat Intelligence officer must get all the information on it. If pictures have been taken, he works with the Photo Interpreter in checking on the damage claims. In all combat areas, there are Air Technical Intelligence officers who have received specialized training in airplane construction, and who form crash intelligence teams. When an enemy plane is shot down, they find it, recover what they can from the wreckage (sometimes they get planes in almost perfect shape), and submit detailed reports on it. They spot new engines, changes in armament and armor, shifts in the location of fuel tanks, development of new instruments for night flying, improvements in design. They ship parts, engines, even whole planes back to rear areas

for testing, and in reports given the pilots they furnish the latest information on what the enemy's best bid for aerial supremacy can and cannot do against our own planes. When enemy airfields are captured, crash intelligence officers join with the troops to examine the planes.

14B6. Naval Records and Library Branch. Another branch of the Office of Naval Intelligence, not a part of any of the four groups just described, is known as the Naval Records and Library Branch. This branch administers the Navy Department library and historical archives. It selects and files important naval records for reference and printing, and prepares for the archives the records of the current war.

15

NAVY REGULATIONS AND CUSTOMS—PART I

A. CUSTOMS

15A1. Customs and regulations. Naval regulations and naval customs are practically synonymous. As a matter of fact, the majority of our present naval regulations have been derived from naval customs developed in the past. Salutes to the quarter-deck, ceremonies for relieving of command, rendering of side honors, precedence of officers in entering boats, visits of courtesy upon reporting to a ship or station, for example, are popularly referred to as naval customs, and yet are now fully covered by specific regulations. It is more than probable that changes or extensions of these regulations in the future will originate from customs that are building up within the service today. The fact that the Navy recognizes valid customs as having substantially the same effect as regulations, therefore, makes the lack of clear distinction between "customs" and "regulations" relatively unimportant. (For example, *Navy Regulations* provides for the ceremonies that are required to be observed by naval personnel on the quarter-deck, yet naval customs dictate no less effectively the steps to be taken to maintain the "sanctity" of the quarter-deck.)

Unfortunately there is no official text for the study of naval customs which have not yet become regulations. They are of limited number, and actual association with the service is the best means of becoming familiar with them.

15A2. Customs and usage. From time to time, situations arise which are not covered by written rules. Conduct in such cases is governed by customs of the service. Customs of the service may be likened, in their origin and development, to the portions of the common law of England similarly established. But custom is not to be confused with usage; the former has the force of law, the latter is merely a fact. There may be usage without custom, but there can be no custom unless accompanied by usage.

The principal conditions to be fulfilled in order to constitute a valid custom are: (1) the act or behavior must be long and consistently continued; (2) it must be well defined and uniformly adhered to; (3) it must be generally accepted so as to seem almost compulsory; and (4) it must not be in opposition to the terms and provisions of a statute, lawful regulation, or order.

It is the obligatory force which attaches to custom that enables it finally to ripen into law. That a custom has legal status is evidenced in the following quotation from *Naval Courts and Boards*: "A specification [which details the offense] must on its face allege facts which constitute a violation of some law,

regulation, or custom of the service." Foreign customs also have a legal status. *Navy Regulations* (art. 117) reads: "The religious institutions and customs of foreign countries visited by ships of the Navy must be respected." In the establishment of custom on the other hand, omission is sometimes as important as commission. Long-continued non-usage may operate to deprive a particular custom of its obligatory character. Some customs, indeed, have the form of "do not" rather than "do." Taboos are often more stringently enforced than customs. The breach of some naval customs merely brands the offender as ill-bred; the violation of others brings disciplinary action.

15A3. Customs and tradition. Customs are closely linked with tradition, and on their continued maintenance much of the *esprit de corps* of the naval service depends. Many of these customs have been passed on to us from great navies of the world, especially the British. (The British, in turn, can trace the origin of theirs to the practices of the Middle Ages or to antiquity.) But the customs which we have adopted have been supplemented by a tradition which is our own. Customs, unwritten but none the less potent factors in the government of the Navy, which time and experience have proved to make for better order, discipline, and increased efficiency have, in obedience to a natural law, changed their form by being merged into written regulations.

Our naval tradition, on the other hand, has been developed from the performance of our own naval personnel. No one knew better than John Paul Jones the importance of great tradition. Thus in the battle against the *Serapis*, he created two of the great American traditions by showing that he didn't know when he was beaten, and later by generously returning to the British Captain the sword which his daring behavior had won. Jones was preeminent among our tradition makers and marked the way for a memorable group to follow—Truxtun, Preble, Macdonough, Lawrence, Porter, Farragut, and Dewey. The traditions of our Navy spring from the gallant deeds of our officers and men. Our customs are patterns of behavior which we have developed for ourselves or borrowed from others.

B. NAVY REGULATIONS

15B1. Regulations for 1775. The first American regulations for the Navy, known as "Rules for the Regulation of the Navy of the United Colonies," were adopted by the Continental Congress on 28 November 1775 and were in force throughout most of the Revolution. They were written by John Adams, always vitally interested in naval affairs and at this time a member of the Marine Committee. Naturally he turned to the rules of the navy of the mother country for a model, since these regulations had been adequate for the greatest naval service in the world. In some places the British regulations were copied verbatim, while in others modifications were necessary. In general our rules were an abridgment and adaptation of the British Naval Statutes and Regulations in force in 1775. It is interesting to note that at a later date our Navy Department was created and that the foundation of our present Navy was laid when Adams,

R U L E S
F O R T H E
R E G U L A T I O N
O F T H E
N A V Y
O F T H E
U N I T E D C O L O N I E S
O F
NORTH-AMERICA;

Established for Preserving their RIGHTS
and Defending their LIBERTIES, and
for Encouraging all those who Feel
for their COUNTRY, to enter into its
Service in that way in which they
can be most Useful.

P H I L A D E L P H I A:

Printed by WILLIAM and THOMAS BRADFORD, 1775.

Figure 96. A reproduction of the original cover of "Rules for the Regulation of the Navy of the United Colonies," written by John Adams.

who had done so much for the Navy during the Revolution, became President of the United States.

These early regulations, eight pages in length, were brief indeed compared to the present bulky volume of some nine hundred pages. More than one-half of the Navys first "Rules" were concerned with the ordinary seamen—his food, care, duties, rights, and punishments; a large part of today's *Regulations* apply to officers and to naval administration.

15B2. Certain interesting provisions. While the "Rules" of 1775 will be discussed later in this chapter, certain interesting provisions may be noted at this point.

It was the duty of commanders of ships to see to it that "divine service be performed twice a day on board, and a sermon preached on Sunday" unless uncontrollable circumstances prevented it.

The punishment for swearing consisted of wearing a "wooden collar, or some other shameful badge of distinction"; a commissioned officer was required to

R U L E S F O R T H E R E G U L A T I O N O F T H E N A V Y, &c.

ART. 1. **T**H E Commanders of all ships and vessels belonging to the THIRTEEN UNITED COLONIES, are strictly required to shew in themselves a good example of honor and virtue to their officers and men, and to be very vigilant in inspecting the behaviour of all such as are under them, and to discountenance and suppress all dissolute, immoral and disorderly practices; and also, such as are contrary to the rules of discipline and obedience, and to correct those who are guilty of the same according to the usage of the sea.

ART. 2. The Commanders of the ships of the Thirteen United Colonies are to take care that divine service be performed twice a day on board, and a sermon preached on Sundays, unless bad weather or other extraordinary accidents prevent it.

ART. 3. If any shall be heard to swear, curse or blasphem the name of God, the Captain is strictly enjoined to punish them for every offence, by causing them to wear a wooden collar or some other shameful badge of distinction, for so long a time as he shall judge proper:—If he be a commissioned officer he shall forfeit one shilling for each offence, and a warrant or inferior officer, six pence: He who is guilty of drunkenness (if a seaman) shall be put in irons until he is sober, but if an officer, he shall forfeit two days pay.

ART. 4. No Commander shall inflict any punishment upon a seaman beyond twelve lashes upon his bare back with a cat of nine tails; if the fault shall deserve a greater punishment, he is to

(4)
to apply to the Commander in Chief of the navy in order to the trying of him by a court martial, and in the mean time he may put him under confinement.

ART. 5. The Captain is never by his own authority to discharge a commission or warrant officer, nor to punish or strike him, but he may suspend or confine him; and when he comes in the way of a Commander in Chief, apply to him for holding a court-martial.

ART. 6. The officer who commands by accident of the Captain's absence (unless he be absent for a time by leave) shall not order any correction but confinement; and upon the Captain's return on board, he shall then give an account of his reasons for so doing.

ART. 7. The Captain is to cause the articles of war to be hung up in some public place of the ship, and read to the ship's company once a month.

ART. 8. Whenever the Captain shall enlist a seaman, he shall take care to enter on his books the time and terms of his entering in order to his being duly paid.

ART. 9. The Captain shall before he fails make return to and leave with the Congress, or such person or persons as the Congress appoint for that purpose, a compleat list of all his officers and men, with the time and terms of their entering; and during his cruise, shall keep a true account of the desertion or death of any of them, and of the entering of others; and after his cruise, and before any of them are paid off, he shall make return of a compleat list of the same, including those who shall remain on board his ship.

ART. 10. The men shall (at their request) be furnished with slops that are necessary, by the Captain or Purser, who shall keep an account of the same; and the Captain in his return in the last mentioned article directed to be made, shall mention the amount delivered to each man in order to its being slopped out of his pay.

ART. 11. As to the term inferior officers the Captain is to take notice, that the same does not include any commission nor any warrant officer, except the second master, surgeon mate, cook, armourer, gun-smith, master at arms and the sail-maker.

ART. 12. The Captain is to take care when any inferior officers or volunteer seamen are turned over into the ship under his command from any other ship, not to take them on the ship's

Figure 97. In spite of the old style of the spelling, the similarity between the "Rules" of 1775 and Navy Regulations is apparent in this reproduction of the first twelve articles.

forfeit one shilling for each offense, and a warrant or inferior officer sixpence. The most extreme punishment which an officer could inflict on a seaman was "twelve lashes upon his bare back, with a cat of nine tails." If it was felt that a more severe punishment was deserved, a court-martial could be convened. A seaman guilty of drunkenness was put in irons until sober; an officer, for this offense, forfeited two days' pay.

As to Navy "chow" our forefathers made good use of the bounties of the sea and solved a manpower problem locally. The early rules provided that on all ships furnished with fishing tackle, "the captain is to employ some of the company in fishing; the fish to be distributed daily to such persons as are sick . . . and the surplus by turns amongst the messes of officers and seamen without favour or partiality and gratis, without any deduction of their allowance of provisions on that account."

The exact amount of food for each man each day of the week was provided. For example, Sunday's bill of fare consisted of "1 lb. bread, 1 lb. beef, 1 lb. potatoes or turnips"; Monday "1 lb. bread, 1 lb. pork, $\frac{1}{2}$ pint peas and four oz. cheese." Each seaman was allowed a half-pint of rum per day, and "discretionary allowances on extra duty and in time of engagement."

Of the sixteen naval offices established only two were commissioned, captain and lieutenant. Five marine offices were also established, the highest being captain. The monthly pay ranged from \$6.67 for able seamen and marine privates to \$32.00 for Navy captains. It should be added that it was the expectation of Congress and the hope of the men that the capture of prizes would substantially supplement the official salaries. John Paul Jones's poster, which appeared throughout New England seeking "gentlemen seamen" for the *Ranger*, suggested that the men could "distinguish themselves in the glorious cause of their country and make their fortunes" as well.

15B3. Naval policy during the Revolution. The committee of Congress which directed and administered the Navy during the Revolution repeatedly enjoined upon commanders of ships the duty of strictly obeying the "Rules." Letters of Instruction to Captains usually ended with an injunction such as the following: "Use your people well, but preserve strict discipline; treat prisoners, if any you make, with humanity; and in all things be duly attentive to the honor and interest of America." The committee encouraged boldness, as will be shown by the following characteristic exhortation to a Commanding Officer: "Although we recommend your taking good care of your vessels and people, yet we should deem it more praiseworthy in an officer to lose his vessel in a bold enterprise than to lose a good prize by too timid a conduct." The tradition of the offensive in the Navy is older than the nation itself. The spirit of discipline, humanity, and enterprise evident in the two quotations is a part of that tradition. While warships have changed vastly and crews are many times larger than in the old days, the spirit of the Navy has remained the same.

15B4. Subsequent Regulations. For a period following the Revolutionary War the Navy ceased to exist; the last ship had been disposed of in 1785. When

the Constitution of the United States went into effect in 1789 there was no Navy in existence. However, during the seventeen-nineties an international situation developed which made the reestablishment of a Navy imperative. So, in 1794 a modest Navy was provided for under the War Department, and in 1798 a Navy Department was created. This, in a sense, marks the formal beginning of the Navy of the United States. The naval regulations which were then adopted were based on the "Rules for the Regulation of the Navy of the United Colonies." Since 1798, a period of almost a hundred and fifty years, more than a score of new editions have been issued by the Navy Department to meet the changing conditions and requirements of a vast and growing service. *Navy Regulations* in 1818 was a bound volume known as the "Blue Book"; in 1832 it was called the "Red Book"; in 1909 it again became the "Blue Book." Modifications of the early statutes appeared, of course, more frequently during periods of great change. For example, no less than four new editions were issued in the ten years between 1860 and 1870, when naval design and naval tactics were changing rapidly, while only two new sets appeared during the seventeen years of relative naval stagnation between 1876 and 1893.

The present system of printing single pages to be inserted in a loose-leaf binder was introduced in 1913, in order to facilitate changes in the regulations of the Navy which were occurring rapidly at that time.

C. NAVY REGULATIONS—1920 EDITION

15C1. General. Today the regulations for the government of all personnel attached to the naval service are those of the 1920 edition of *Navy Regulations*. These were reprinted in 1942 with changes to date. This formidable loose-leaf volume is issued by the Secretary of the Navy and approved by the President of the United States. There are approximately 900 pages of fine print in it.

The principal purpose of the publication is to communicate to the naval establishment the rules under which it shall operate. These rules constitute the interpretation of and the general manner of applying all laws relating to the Navy. Among these rules are found the answers to almost all problems of principle. These regulations set forth the duty, responsibility, authority, distinction, and relation of the various bureaus, offices, and individual officers, each to the other. It is the most important of the administrative publications of the Navy, and is never contravened by other Navy publications. Details coming exclusively under the cognizance of a particular bureau or office are incorporated in a separate manual by the bureau or office concerned and are not included in *Navy Regulations*. In general, *Navy Regulations* deals with questions of principle, while detailed instruction as to methods for applying the principles is contained in the manuals of the various bureaus and other publications.

15C2. Changes in Navy Regulations. Changes in *Navy Regulations* are published in the form of loose-leaf sheets from time to time. Certain changes are directed to be made by hand in ink, while others are made by adding sheets with new material or by substituting new sheets for obsolete ones. (Advance

changes are often made by letter.) No proposed change may be submitted to the Secretary of the Navy for approval until it has been referred to the Chief of Naval Operations and to all bureaus, to the Office of the Judge Advocate General, and to the Commandant of the Marine Corps. (The written comment of each bureau or office is brought to the Secretary's attention at the time the suggested change is submitted.) The President finally must approve all changes. *Navy Regulations* is prepared, revised, and recorded by the Chief of Naval Operations.

15C3. Reasons for changes in the Regulations. Obsolete or unnecessary regulations are deleted, for they greatly weaken the standing and authority of the essential ones. To be effective, regulations should be concise, should not attempt to cover every detail, and should be changed only for adequate reasons. Permanence is a valuable asset in many respects, provided it does not degenerate into a stagnating conservatism. The rules (approximating 40 paragraphs) which were sufficient to govern the Navy when it consisted of a few relatively small sailing vessels would obviously be inadequate today with the advent of steam, electricity, and radio communication. The invention of submarines, torpedoes, airplanes, armor plate, long-range guns, and the like, has necessitated many new varieties of specialized knowledge and skill. With the increased complexity of the Navy, a greater need for defining the precise functions, duties, and rights of personnel is essential. Hence, the bulk of present regulations is understandable.

Regulations, in any event, would not have remained static. Changes and reforms of many kinds were in the air in the nineteenth century. For example, the death knell sounded for two long-honored naval customs about the middle of the century: (1) The early regulations had sanctioned flogging and a Captain was permitted to award twelve lashes upon the bare back with a cat-o'-nine-tails. Since men were often mangled and crippled for the rest of their lives, especially when the lashes were "well laid on," as the ancient phrase ran, much opposition was raised to this cruel punishment; and it was finally abolished by Congress in 1850. (2) Many objections had also arisen to the spirit ration, frequently referred to as "grog," which was authorized from the first. During the eighteenth century sailors had sung:

"For grog is our starboard, our larboard,
Our mainmast, our mizen, our log—
At sea, or ashore, or when harbour'd,
The mariner's compass is grog."

However, in 1862 the spirit ration which consisted of "two dips" a day was abolished, and in its place the men were given a commutation of a few cents per day. Sailors have a way of expressing their laments in song and the new refrain ran:

"They raised our pay six cents a day,
But stopped our grog forever."

Today punishment by flogging (also the use of irons as a punishment) and the issue of grog are forbidden under *Navy Regulations*.

15C4. Contents. A glance at the ten-page table of contents and 135-page index of *Navy Regulations* suggests the great variety of subjects covered in its fifty-five chapters, as well as the growth which has occurred between 1775 and the present day. Since the first chapter, "Articles for the Government of the Navy," constitutes in a sense the core of *Navy Regulations*, it merits detailed consideration and the remaining part of this chapter will be devoted to it. The other fifty-four chapters will be considered briefly in Chapter 16.

D. CHAPTER 1—ARTICLES FOR THE GOVERNMENT OF THE NAVY

15D1. "Articles"—Importance. Here is the fundamental law on which the American Navy rests. The "Articles" which have been approved by Congress and thus made into law for the government of the Navy are the keystone of the naval disciplinary system. (According to the Constitution, Congress has the power "To make rules for the government and regulations of the land and naval forces.") The general features of the remainder of *Navy Regulations* (i.e., the other 54 chapters) are founded on the "Articles" and are issued on the authority of the President. (The President as Commander in Chief is authorized to issue personally or through his military subordinates such orders and directives as are necessary and proper to insure order and discipline in the Navy.)

The fact that the "Articles" are required "to be hung up in some public part of the ship and read once a month to the ship's company" is a clear indication of their importance and of the necessity for everyone in the Navy to be thoroughly familiar with them. In a sense, they are the charter of the rights, duties, obligations, and privileges of the officers and men. These articles of war and peace compose the "constitution" of the Navy and from them naval regulations and instructions have been derived. They are the so-called "Rocks and Shoals" and may be said to bear the same relationship to *Navy Regulations* as do the Ten Commandments to the *Old Testament*. The process of reading and interpreting the "Articles" continues throughout the naval career of all commissioned and enlisted personnel.

15D2. "Rules" in 1775—"Articles" today. Although the current *Navy Regulations* constitutes a volume more than a hundred times as large as the early "Rules for the Regulation of the Navy of the United Colonies," nevertheless the fundamental law, the "constitution," as we have called it, remains much the same as at the beginning of our Navy. The "Rules for the Regulation of the Navy of the United Colonies" fill a little more than one-third of the space occupied by today's "Articles" (Chapter 1, *Navy Regulations*). In fact, the early "Rules" have been almost bodily incorporated into Chapter 1. The provisions of the present "Articles" are more in number, more detailed, and the arrangements more orderly and logical. In many instances, the language is practically the same and few new subjects have been added. On the other hand, there are several omissions; for example, the rules of 1775 contain paragraphs relating to the food,

pay, etc., that now have no place in the fundamental law of the Navy. Thus the regulations relating to morals and conduct have had few changes; those relating to material and organization have been expanded tremendously.

A brief comparison of the present "Articles" (Rocks and Shoals") with the "Rules" of 1775 will show conclusively that a large part of the code embraced in the rules and regulations of 1775, has been retained. Three concrete examples will serve as illustrations. The most striking instance of practical identity is found in the first article, which expresses the animating spirit of the Navy.

1775 Edition—The Commanders of all ships and vessels belonging to the Thirteen United Colonies are strictly required to shew in themselves a good example of honor and virtue to their officers and men, and to be very vigilant in inspecting the behaviour of all such as are under them, and to discountenance and suppress all dissolute, immoral and disorderly practices; and also, such as are contrary to the rules of discipline and obedience, and to correct those who are guilty of the same according to the usage of the sea.

1920 Edition—The commanders of all fleets, squadrons, naval stations, and vessels belonging to the Navy, are required to show in themselves a good example of virtue, honor, patriotism, and subordination; to be vigilant in inspecting the conduct of all persons who are placed under their command; to guard against and suppress all dissolute and immoral practices, and to correct, according to the laws and regulations of the Navy, all persons who are guilty of them; and any such commander who offends against this article shall be punished as a court-martial may direct.

1775 Edition—The officer who commands by accident of the Captain's absence (unless he be absent for a time by leave) shall not order any correction but confinement; and upon the Captain's return on board he shall then give an account of his reasons for so doing.

1920 Edition—No officer who may command by accident, or in the absence of the commanding officer, except when such commanding officer is absent for a time by leave, shall inflict any other punishment than confinement.

1775 Edition—The Captain is to cause the articles of war to be hung up in some public place of the ship, and read to the ship's company once a month.

1920 Edition—He [Captain] shall cause the articles for the government of the Navy to be hung up in some public part of the ship and read once a month to his ship's company.

Punishment was provided in the early rules (note similarity today) for those who "shall begin, excite, cause or join in any mutiny or sedition"; those who "swear, curse, or blaspheme the name of God"; those who strike their superior officers; those who sleep on watch; those who disobey orders; those who "behave themselves faintly" in battle; those who "cry for quarters"; those who "basely desert their duty or station"; those who are guilty of murder, theft (sails and anchors are specifically mentioned), quarrelling, etc. A court-martial might inflict death for desertion, mutiny, or murder. Thus, the general principles of discipline controlling the officers and men in the days of John Paul Jones have had continuous life and force.

There is inspiration to be gained through acquaintance with the "Rules" of 1775. The statement on their cover characterizes the spirit which pervades them. It assured the patriots who joined the colors that the regulations were "*Established for Preserving their Rights and Defending their Liberties, and for Encouraging all those who Feel for their Country, to enter into its Service in that way in which they can be most Useful.*"

And now let us turn to the "Articles for the Government of the Navy" as they exist today.

15D3. Discussion of certain articles. Since the "Articles" are conspicuously posted and read to all hands once each month, it will be necessary in brief review to make only certain observations regarding them.



Figure 98. Bound for the attack on Marcus Island, crewmen of a United States light cruiser are gathered aft for Sunday divine services.

In article 1, it is definitely stated that officers in command throughout the Navy must deport themselves so as to set an "example of virtue, honor, patriotism, and subordination." Thus there has been placed upon them the obligation to guide, influence, and mold subordinates. They must practice what they preach, for the philosophy of "Don't do as I do, do as I say" is taboo in the Navy. Note the importance of subordination. The Commanding Officer is expected to show the same respect and obedience to his superiors as he expects from those under his command.

Moreover, he is to *inspect* the conduct of all persons under him—not merely assume responsibility for it. He not only corrects, but *suppresses* and *guards against* certain practices. For example, he must provide adequate recreational facilities for his men and thus *prevent* trouble which might otherwise arise. Article 1 reads as follows:

The commanders of all fleets, squadrons, naval stations, and vessels belonging to the Navy are required to show in themselves a good example of virtue, honor, patriotism, and subordination; to be vigilant in inspecting the conduct of all persons who are placed under their command; to guard against and suppress all dissolute and immoral practices, and to correct, according to the laws and regulations of the Navy, all persons who are guilty of them; and any such commander who offends against this article shall be punished as a court-martial may direct.

While freedom of religious belief is part of the foundation of our government, it is not to be interpreted in the Navy as encouraging atheism. Indeed, article 2 specifically places the responsibility on commanders of vessels and naval stations (where chaplains are attached) to "cause divine service to be performed on Sunday whenever the weather and other circumstances allow it

to be done." Where there is no chaplain attached, the Commanding Officer may desire to conduct divine services himself or designate (or permit) someone else to do so. For example, a chaplain, as a passenger on a submarine in the Pacific, recently conducted services. Moreover, all naval personnel are "earnestly recommended" to attend "every performance of the worship of Almighty God."

Although Commanding Officers may encourage attendance at religious services on a voluntary basis, no coercion or discrimination of any kind is sanctioned to compel such attendance.

Finally in article 3 it is stated that any irreverent behavior during divine service is strictly forbidden. Articles 2 and 3 read:

The commanders of vessels and naval stations to which chaplains are attached shall cause divine service to be performed on Sunday whenever the weather and other circumstances allow it to be done; and it is earnestly recommended to all officers, seamen, and others in the naval service diligently to attend at every performance of the worship of Almighty God.

Any irreverent or unbecoming behavior during divine service shall be punished as a court-martial may direct.

Article 4 enters into detail regarding the standard of conduct expected in time of war or battle. The most formidable first impression of this article is the *death* penalty, but it should be noted that the significance of this article lies in the words "such other punishment as a court-martial may adjudge." Since the beginning of our Navy the law has been interpreted to mean that "such other punishment" is limited by the custom of the service, and only such punishments as are *usual* are authorized. The "Articles" themselves prohibit inhuman, extreme, or unusual punishments.

Naval history is filled with events which exemplify the principles embodied in this article. It would be difficult for any master of the English language to improve upon the clearness, conciseness, and directness of expression employed in these phrases. Paragraph 1 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who makes, or attempts to make, or unites with any mutiny or mutinous assembly, or, being witness to or present at any mutiny, does not do his utmost to suppress it; or, knowing of any mutinous assembly or of any intended mutiny, does not immediately communicate his knowledge to his superior or commanding officer.

In the late years of the eighteenth century mutiny presented a serious problem in some of the navies of the world. Pirates were still on the high seas and it was a temptation for a crew to mutiny, take over the ship, and go pirating. It is notable that no United States man-of-war has ever mutinied or been in the hands of mutineers, while in other navies whole squadrons and fleets have mutinied.

However, in 1842 the well-known mutinous incident occurred in the United States Navy on the brig-of-war *Somers*. It constitutes our only approach to mutiny. The plot was hatched in the brain of Midshipman Philip Spencer, an ill-balanced youth, son of the Secretary of War. When the plot was revealed to Commander Alexander Slidell Mackenzie, a stern and pious officer, he immediately arrested Spencer and two other alleged leaders. A court of ship's offi-

cers promptly declared them guilty of "attempting mutiny" and the three were hanged at the yardarm. A dignified ceremony followed. On a rough sea and by lantern light, the bodies of the three were committed to the deep. (Captain Mackenzie, who did not have the President's approval for these executions, was court-martialed on several charges when he returned to the United States, but was acquitted.)

Paragraph 8 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who sleeps upon his watch.

Ever since man first went down to the sea in ships, sleeping on watch has been a most serious offense for clearly the offender was endangering the lives of his fellow men or even the security of the nation itself. Methods of punishment have varied. Perhaps the height of ingenuity was reached in the days of Queen Elizabeth when the fourth offense of this nature brought upon the head of the unfortunate fellow the following ordeal: "Being taken asleep he shall be hanged to the bowsprit end of the ship in a basket, with a can of beer, a loaf of bread, and a sharp knife, and choose to hang there until he starve or cut himself into the sea."

In war and especially under modern wartime conditions at sea, the crew seldom gets sufficient sleep. The wise officer will resort to practical, positive measures to keep the watch awake, rather than rely on the threat of the death penalty for sleeping on watch.

Paragraph 9 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who leaves his station before being regularly relieved.

Here is a positive order to remain at one's post until properly relieved. If we consider the disastrous consequences which might result in loss of life and property if one left his post before someone else assumed the responsibility it can be readily understood why this provision is emphasized.

Few young men in civil life, for example, are called upon to accept responsibilities as heavy as those of the officer of the deck of a man-of-war at sea. There is no counterpart in any other military service. An officer assumes a great obligation when he takes over the deck and utters those simple words, "I believe you, Sir."

Paragraph 11 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who unlawfully sets on fire, or otherwise unlawfully destroys, any public property not at the time in possession of an enemy, pirate, or rebel.

The seriousness of the act of destroying government property is emphasized in this paragraph. This article applies to all items of government equipment with which naval personnel may come in contact in the course of their work ashore or afloat. It is applicable to a textbook issued a student in a naval training school, and equally applicable to every item of equipment on a battleship.

Paragraph 12 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who strikes or attempts to strike the flag to an enemy or rebel, without proper authority, or, when engaged in battle, treacherously yields or pusillanimously cries for quarter.

This paragraph brings to mind John Paul Jones and a near disaster in 1779 when the *Bonhomme Richard* fought the *Serapis*. At a decisive stage of the battle, a gunner in a state of panic loudly clamored for quarter and rushed to haul down the colors. According to the "Rules," the man was subject to court-martial, but Jones, being forced to act immediately, hurled a pistol at the fellow, breaking his skull, and thus rendered the decision.

Paragraph 13 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who in time of battle, displays cowardice, negligence, or disaffection, or withdraws from or keeps out of danger to which he should expose himself.

A similar article (except that death was mandatory) was responsible about one hundred and ninety years ago for the tragic death of a British Admiral who was executed on the quarter-deck of one of his ships in accordance with the sentence of a court-martial which found him guilty of failing to do his utmost to capture and destroy an enemy fleet. The case was that of Admiral Byng and his engagement with the French Fleet off Port Mahon, 20 May 1756. Strangely enough the cause of his failure was not cowardice, but a too liberal adherence to "Fighting Instructions" which, combined with bad judgment, kept him from engaging the enemy with full force when once joined in battle.

In 1799 in our own Navy an Officer on Truxtun's ship killed a man for displaying cowardice during a battle. Standing firm to one's post in battle has long since been established as a tradition of the service.

Paragraph 16 (article 4) reads:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who being in command of a fleet, squadron, or vessel acting singly, neglects, when an engagement is probable, or when an armed vessel of an enemy or rebel is in sight, to prepare and clear his ship or ships for action.

In accordance with the above, Captain James Barron was tried by a court-martial early in the nineteenth century. The trial occurred in connection with the *Chesapeake-Leopard* affair (1807) at a time when American-British relations were strained. As the *Chesapeake*, in command of Captain Barron, was leaving Hampton Roads for the Mediterranean, the *Leopard* stopped her and demanded the release of certain British deserters. At the Americans' refusal, the British promptly opened fire. Since the *Chesapeake* was not prepared for action and the Captain appeared to lack initiative and resolution, her colors were hastily hauled down. As a result of the American ship's tame submission, Barron was tried and found guilty of "neglecting, on the probability of an engagement, to clear ship for action."

Paragraphs 17 and 20 (article 4) read:

The punishment of death, or such other punishment as a court-martial may adjudge, may be inflicted on any person in the naval service who does not, upon signal for battle, use his utmost exertions to join in battle; or does not afford all practicable relief and assistance to vessels belonging to the United States or their allies when engaged in battle.

These two sections recall to mind the controversy that took place after the battle of Lake Erie. Many claimed that Captain Elliott of the *Niagara* failed to support Commodore Perry at a critical stage in the battle. No court-martial, however, resulted. Since that time the wording of the sections in the "Articles" covering such situations has been clarified and there can no longer be any question as to one's duty at such a time.

A careful inspection of articles 4, 5, and 6 will disclose that there are twenty-two different offenses of such serious nature that a court-martial may adjudge the death penalty. Briefly summarized these offenses are:

1. Mutiny
2. Disobedience of orders
3. Striking superior officer
4. Intercourse with an enemy
5. Unlawfully receiving messages from an enemy
6. Desertion in time of war
7. Deserting trust in time of war
8. Sleeping on watch
9. Leaving station before being regularly relieved
10. Willful stranding or injury to vessels
11. Unlawful destruction of public property
12. Striking flag or treacherously yielding or pusillanimously crying for quarter
13. Cowardice in battle
14. Deserting duty in battle
15. Neglecting orders to prepare for battle
16. Neglecting to clear for action
17. Neglecting to join on signal for battle
18. Failing to encourage men to fight
19. Failing to seek encounter
20. Failing to afford relief in battle
21. Spying in time of war
22. Murder

Article 8 lists a number of offenses which may be punished as a court-martial may adjudge.

Paragraph 1 of article 8 reads:

Such punishment as a court-martial may adjudge may be inflicted on any person in the Navy who is guilty of profane swearing, falsehood, drunkenness, gambling, fraud, theft, or any other scandalous conduct tending to the destruction of good morals.

The vices mentioned above have always been serious offenses in the navies of the world. For example, three hundred years ago in the British Navy blasphem-

ing was punished by burning the tongue of the offender with a redhot iron.

It should be emphasized at this point that violations of this article are court-martial offenses whether one is on duty aboard ship, on liberty, or on leave. Drunkenness on liberty is one of the most common court-martial offenses in the Navy.

Before leaving paragraph 1 (article 8) it should be noted that it provides that scandalous conduct tending to the destruction of good morals is also punishable at the discretion of a court-martial. Offenses of a scandalous nature are indeed diverse. Since many attempted or uncompleted offenses are not elsewhere specified, most such, involving scandalous acts, are laid under this general charge.

Paragraph 2 of article 8 reads:

Such punishment as a court-martial may adjudge may be inflicted on any person in the Navy who is guilty of cruelty toward, or oppression or maltreatment of, any person subject to his orders.

A survey of the court-martial records of seventy and eighty years ago will disclose a number of cases where officers were tried for physical cruelty toward and maltreatment of persons under their command. Happily such cases do not exist today, but the obligation to deal justly remains as binding as when the article was first written.

Many other paragraphs in article 8 are noteworthy for they point out a great number of offenses punishable at the discretion of a court-martial. A court-martial is empowered to mete out punishment to one who "quarrels with, strikes, or assaults" any person in the Navy; who "treats his superior officer with contempt, or is disrespectful to him in language or deportment, while in the execution of his office"; who is "negligent or careless in obeying orders, or culpably inefficient or careless in the performance of duty"; who "knowingly makes or signs, or aids, abets, directs, or procures the making or signing of, any false muster"; etc. (In view of the extreme importance of this paragraph, it might be well to reread it. It contains several "rocks and shoals" which have brought disaster to more than one individual in the service.)

Paragraph 5 (article 8) reads:

Such punishment as a court-martial may adjudge may be inflicted on any person in the Navy who sends or accepts a challenge to fight a duel or acts as a second in a duel.

This paragraph was inserted into the "Articles" in 1862 to end a barbarous practice. Dueling was so prevalent in the early nineteenth century that one historian alleges that more officers were killed in this manner than in the naval actions of the period. Perhaps no other single incident in naval history shocked the American people more than the tragic death of the country's idol, Stephen Decatur, at the hands of Commodore James Barron in 1820.

Paragraph 19 (article 8) reads:

Such punishment as a court-martial may adjudge may be inflicted on any person in the Navy who is absent from his station or duty without leave or after his leave has expired.

This is the most frequent offense committed by enlisted men. It takes

numerous forms, varying in degree from the man who is delayed for a short period of time in returning to the ship, to the man who deliberately remains out for months or years.

Overstaying leave because of oversleeping, for example, involves neglect on the enlisted man's part, and is a serious offense. He should get back to his ship or station as quickly as possible. Overstaying leave deliberately for any reason whatever is a most serious offense, since it defies the authority placed over the individual.

Missing ship, except under most unusual circumstances, regardless of the length of absence, is an offense warranting trial by a general court-martial. (*Navy Department Bulletin*, 14 May 1944, p. 82.)

Article 10 reads:

Any commissioned officer of the Navy or Marine Corps who, having tendered his resignation, quits his post or proper duties without leave and with intent to remain permanently absent therefrom, prior to due notice of the acceptance of such resignation, shall be deemed and punished as a deserter.

This article at the present time has little application to most young officers in the service as it is obvious that resignations are not likely to be accepted in wartime.

Article 12 reads:

No person connected with the Navy shall, under any pretense, import in a public vessel any article which is liable to the payment of duty.

An officer must be careful that he himself does not disobey this injunction. In addition, he must use preventive measures with his men. A young officer may find himself in difficulties if he is not vigilant in carrying out this article.

Article 13 reads:

Distilled spirits shall be admitted on board vessels of war only upon the order and under the control of the medical officers of such vessels, and to be used only for medical purposes.

Early in the War Between the States the issue of the spirit ration was terminated and each enlisted man received an additional few cents a day in pay. At the same time the introduction of distilled spirituous liquor on board vessels of war was forbidden. So prohibition in our Navy is not a recent development.

Article 18 reads:

Every person who in time of war deserts the naval service of the United States shall be deemed to have voluntarily relinquished and forfeited his rights of citizenship, as well as his right to become a citizen, and shall be forever incapable of holding any office of trust or profit under the United States, or of exercising any rights of citizens thereof.

Desertion is an offense which is tried by general court-martial and the sentence in peacetime (see art. 8, Par. 21) is very severe—usually a term of confinement amounting to years at hard labor in a naval prison. In time of war the supreme penalty may be exacted—death. If a lesser punishment is meted out to an offender in time of war it is always accompanied by loss of Federal citizenship, a handicap which lasts throughout his natural life.

Article 19 applies particularly to the duties and obligations of recruiting officers. It reads in the following manner:

Any officer who knowingly enlists into the naval service any person who has deserted in time of war from the naval or military service of the United States, or any insane or intoxicated person, or any minor between the ages of 14 and 18 years, without the consent of his parents or guardian, or any minor under the age of 14 years, shall be punished as a court-martial may direct.

The problems faced by recruiting officers today are vastly different from those experienced in 1798 when the present Navy was founded. In the latter year no bureau ordered men to a ship, but the Captain of each vessel was given the responsibility of recruiting his own crew. An official directive to Captain Thomas Truxtun ordered him "to open Houses of Rendezvous in proper Places" to engage his seamen.

Careful selection of recruits was in evidence in 1798. One early directive read: "It being essential that those who enlist, should feel an Inclination for that kind of Life, no indirect Methods are allowable to inveigle Men into the Service of the United States; it is forbidden therefore to inlist any Individual while in a State of Intoxication, or to have him sworn until twenty four hours after he shall have signed the Inlistment." A physical examination was necessary and a surgeon was required to certify that the men were "well organized, healthy, robust, and free from scorbatic and consumptive affections" before they could be accepted or an advance in pay made. Captain Truxtun advised an officer who was recruiting men in Baltimore for the famous *Constellation* which was soon to make history that: "Every expence attending the rendezvous for fire, candle, Liquor, house rent &c &c, must not exceed one dollar for every man actually entered & received on board—you must come to a clear understanding with Mr. Cloney [owner of the house] on this subject, before you open the rendezvous. A reasonable allowance [Truxtun quaintly added] will be made you for music to indulge and humour the Johns in a farewell frolic."

Article 20 lays down certain fundamental rules which must be obeyed by the Commanding Officer of a vessel. (Chapter 22 in *Navy Regulations*, entitled "Commanding Officer of a Ship," outlines his responsibilities and duties in detail.)

Paragraphs 7 and 8 (article 20) which are closely related are as follows:

Every commanding officer of a vessel in the Navy shall obey the following rules:

He shall cause frequent inspections to be made into the condition of the provisions on his ship and use every precaution for their preservation.

He shall frequently consult with the surgeon in regard to the sanitary condition of his crew, and shall use all proper means to preserve their health. And he shall cause a convenient place to be set apart for sick or disabled men, to which he shall have them removed, with their hammocks and bedding, when the surgeon so advises, and shall direct that some of the crew attend them and keep the place clean.

You will note that paragraphs 7 and 8 bestow upon the Commanding Officer responsibility for watching over the health of his crew by providing for frequent inspection of provisions on board, and by consulting with the surgeon in regard to sanitary conditions. The Commanding Officer's duty today has been made easier by modern developments in the fields of transportation and refrigeration.

In sailing days, poor food and drink were frequently the cause of discontent and illness on board. One individual, referring to naval conditions around 1800 said that in "spite of all the fumigations the ships were never free from unpleasant smells; the dank musty smell of dry-rot, the acrid and awful smell of bilge water, and the smells of decaying stores and long defunct rats." Somewhat earlier it was reported: "When we had one man dyed by shot in the Navy we had ten dyed by means of bad provisions." Fortunately these days are past and today the health of the personnel on board our ships is ordinarily phenomenally good.

Paragraph 10 (article 20) reads as follows:

Every commanding officer of a vessel in the Navy shall obey the following rules:
He shall cause the Articles for the Government of the Navy to be hung up in some public part of the ship and read once a month to his ship's company.

Here is reemphasized the necessity now, as in 1775, for naval personnel to understand fully their obligations, their duties, their rights, and their privileges as clearly and directly stated in the "Articles."

Article 21 reads:

When the crew of any vessel of the United States are separated from their vessel by means of her wreck, loss, or destruction, all the command and authority given to the officers of such vessel shall remain in full force until such ship's company shall be regularly discharged from or ordered again into service, or until a court-martial or court of inquiry shall be held to inquire into the loss of said vessel. And if any officer or man, after such wreck, loss, or destruction, acts contrary to the discipline of the Navy, he shall be punished as a court-martial may direct.

This article offers some interesting possibilities for speculation. What limit, for example, should be placed on it? Suppose the crew were stranded on an island and *never* rescued?

In order to provide for exigencies which might occur, yet for which no specific rules have been laid down, article 22(a) has been included. It reads:

All offenses committed by persons belonging to the Navy which are not specified in the foregoing articles shall be punished as a court-martial may direct.

Based on this article is the familiar charge of conduct unbecoming an officer and a gentleman. *Naval Courts and Boards* (p. 89) gives as examples of violation of this charge the following:

Knowingly making a false official statement; dishonorable neglect to pay debts; opening and reading another's letters; giving a check on a bank where there were no funds to meet it, and without intending that there should be; using insulting or defamatory language to another officer in his presence, or about him to other military persons; being grossly drunk and conspicuously disorderly in a public place; public association with notorious prostitutes; failing without a good cause to support his family.

Also based on article 22(a) is the familiar charge of conduct to the prejudice of good order and discipline. *Naval Courts and Boards* (p. 83) cites as violations of this charge the following instances as applied to officers:

Disobedience of standing orders, or of the orders of an officer when the offense is not chargeable under a specific article; allowing a man to go on duty knowing him to be drunk; rendering himself unfit for duty by excessive use of intoxicants or drugs.

Fraudulent enlistment is covered in article 22(b) which follows:

Fraudulent enlistment, and the receipt of any pay or allowance thereunder, is hereby declared an offense against naval discipline and made punishable by general court-martial, under this article.

This article is concerned with (1) fraudulent enlistment, which involves willful and deliberate concealment of a fact which if known to the recruiting officer, would result in the applicant's rejection, and (2) receipt of any pay allowances as a result of such enlistment. When an individual enlists, knowing he is without a discharge from another enlistment in the Navy or Marine Corps, by that fact alone he may be considered as violating this regulation. However, an individual who has never been in the Navy or Marine Corps, or who has been discharged, but who nevertheless concealed from the recruiting officer information which would have caused his rejection, may be considered as having violated this regulation when he receives pay allowance as a result of such enlistment.

Naval personnel are required to maintain the same high standard of conduct ashore as afloat. There is, of course, no question of jurisdiction at sea, since the ship carries her national laws with her. Article 23, which keeps naval personnel under moral restraint ashore reads:

All offenses committed by persons belonging to the Navy while on shore shall be punished in the same manner as if they had been committed at sea.

Article 24 definitely limits a Commanding Officer of a vessel in the punishment he may inflict upon a commissioned or warrant officer. Also enumerated in this article are the punishments a Commanding Officer may award an enlisted man. It would be well for the officer candidate not only to have a thorough knowledge of this article, but also article 30 (punishments a summary court-martial may award), article 35 (certain General Court-Martial punishments), and article 64(b) (punishments a deck court may award).

Article 24 follows:

No commander of a vessel shall inflict upon a commissioned or warrant officer any other punishment than private reprimand, suspension from duty, arrest, or confinement, and such suspension, arrest, or confinement shall not continue longer than 10 days, unless a further period is necessary to bring the offender to trial by a court-martial; nor shall he inflict, or cause to be inflicted, upon any petty officer, or person of inferior rating, or marine, for a single offense, or at any one time, any other than one of the following punishments, namely:

- (1) Reduction of any rating established by himself.
- (2) Confinement not exceeding 10 days, unless further confinement be necessary, in case of a prisoner to be tried by a court-martial.
- (3) Solitary confinement, on bread and water, not exceeding 5 days.
- (4) Solitary confinement not exceeding 7 days.
- (5) Deprivation of liberty on shore.
- (6) Extra duties.

No other punishment shall be permitted on board of vessels belonging to the Navy, except by sentence of a court-martial. All punishments inflicted by the commander, or by his order, except reprimands, shall be fully entered upon the ship's log.

Article 30 enumerates the punishments which a summary court-martial may award. (A summary court-martial consists of three officers, not below the rank of ensign, as members and a recorder—article 27.)

Article 30 follows:

Summary courts-martial may sentence petty officers and persons of inferior ratings to either a part or the whole, as may be appropriate, of any one of the following punishments, namely:

(1) Discharge from the service with bad-conduct discharge; but the sentence shall not be carried into effect in a foreign country.

(2) Solitary confinement, not exceeding 30 days, on bread and water, or on diminished rations.

(3) Solitary confinement not exceeding 30 days.

(4) Confinement not exceeding 2 months.

(5) Reduction to next inferior rating.

(6) Deprivation of liberty on shore on foreign station.

(7) Extra police duties, and loss of pay, not to exceed 3 months, may be added to any of the above-mentioned punishments.

Actually the authorized punishments by a summary court-martial have become, during the war, as a practical matter, quite limited. Since the Navy needs men badly, it hesitates to give a Bad-Conduct Discharge except in case of incorrigibles who are useless to the service. The brig space is limited and men are needed on the guns and at other battle stations. So with the reduction in rating—rated men are in demand and it has become the policy to reduce only for incompetency. Deprivation of liberty on shore on foreign station frequently cannot be resorted to as a form of punishment since opportunities for shore liberty in wartime are relatively rare. In general, in wartime, extra duties and loss of pay constitute about the only practicable punishments.

Article 32 provides an "appeal" or review of a summary court-martial. There is no procedure for appealing, in the ordinary sense, from the sentence of a court-martial, because of the fact that every case is automatically reviewed by the convening authority and by his immediate superior in command before the sentence is carried into execution.

Article 32 reads:

No sentence of a summary court-martial shall be carried into execution until the proceedings and sentence have been approved by the officer ordering the court, or his successor in office, and by his immediate superior in command: *Provided*, That if the officer ordering the court, or his successor in office, be the senior officer present, such sentence may be carried into execution upon his approval thereof, subject to the provisions of article 54 (b).

An officer who, having ordered a summary court-martial, feels that the sentence is inappropriate has, according to article 33, the following courses of action open to him:

The officer ordering a summary court-martial shall have power to remit, in part or altogether, but not to commute, the sentence of the court. And it shall be his duty either to remit any part or the whole of any sentence, the execution of which would, in the opinion of the surgeon or senior medical officer on board, given in writing, produce serious injury to the health of the person sentenced, or to submit the case again, without delay, to the same or to another summary court-martial, which shall have power, upon the testimony already taken, to remit the former punishment and to assign some other of the authorized punishments in the place thereof.

A general court-martial, which consists of not more than 13 or less than 5 commissioned officers as members and a judge advocate, may inflict any punishment (also many additional ones) that an inferior court may impose. Article 35 reads:

Any punishment which a summary court-martial is authorized to inflict may be inflicted by a general court-martial.

Article 49 reads:

In no case shall punishment by flogging, or by branding, marking, or tattooing on the body be adjudged by any court-martial or be inflicted upon any person in the Navy. The use of irons, single or double, is abolished, except for the purpose of safe custody or when part of a sentence imposed by a general court-martial.

Flogging, the most notorious of the punishments mentioned in article 49, was abolished in our Navy about the middle of the last century. Strange as it may seem, most of the sailors were strongly in favor of this punishment, feeling that without drastic chastisement the good men would have to do the work of the shirkers. All navies since early Christian times had used the system of flogging as a corrective measure with their enlisted personnel.

It should be noted at this point that articles 1 to 23 inclusive deal, in the main, with offences and duties; articles 24 to 70 deal primarily with naval courts.

In naval law, the highest tribunal is the general court-martial. It may try both officer and enlisted personnel. The two inferior courts, namely summary court-martial and deck court, try enlisted personnel only. The "Articles" also deal with the authority of Commanding Officers to convene courts-martial, the constitution and powers of such courts, as well as other provisions relating to the administration of justice in the Navy. (Chapter 4 in *Navy Regulations*, entitled "Administration and Discipline," expands on certain phases of this subject.)

Each member of a court-martial has an equal voice and the "Articles" specify that a *majority* of votes decides all questions and issues before the court. The only exception to this rule has to do with the sentence of death which requires the concurrence of two-thirds of the members present, and then only in cases expressly provided in the "Articles." Thus in the matter of determination of guilt or innocence of the accused before a court-martial, there is a distinct departure from the *unanimous* vote required by a jury in a civilian court to reach a verdict of guilty. Article 50 reads:

No person shall be sentenced by a court-martial to suffer death, except by the concurrence of two-thirds of the members present, and in the cases where such punishment is expressly provided in these articles. All other sentences may be determined by a majority of votes.

Articles 53 and 54 contain provisions for review. When a sentence of a court-martial extends to such severe penalties as loss of life or dismissal of an officer from the service, it must be approved by the President of the United States before it can be carried out. It is interesting to note that the President may approve the sentence and then immediately pardon the offender. It will also be noted that the Secretary of the Navy may set aside the proceedings or remit or mitigate, in whole or in part, the sentence imposed by any naval court-martial. Articles 53 and 54 follow:

No sentence of a court-martial, extending to the loss of life, or to the dismissal of a commissioned or warrant officer, shall be carried into execution until confirmed by the President. All other sentences of a general court-martial may be carried into execution on confirmation of the commander of the fleet or officer ordering the court. (N.R. art. 53.)

Every officer who is authorized to convene a general court-martial shall have power, on

revision of its proceedings, to remit or mitigate, but not to commute, the sentence of any such court which he is authorized to approve and confirm.

The Secretary of the Navy may set aside the proceedings or remit or mitigate, in whole or in part, the sentence imposed by any naval court-martial convened by his order or by that of any officer of the Navy or Marine Corps. (N.R. art. 54 (a) (b).)

Article 64(b) describes the constitution and powers of a deck court. It states:

Deck courts shall consist of one commissioned officer only, who, while serving in such capacity shall have power to administer oaths, to hear and determine cases, and to impose either a part or the whole, as may be appropriate, of any one of the punishments prescribed by article 30 of the Articles for the Government of the Navy: *Provided*, That in no case shall such courts adjudge discharge from the service or adjudge confinement or forfeiture of pay for a longer period than 20 days.

It is well to remember that these 70 articles—a stern code born of necessity—are the result of centuries of experience and experiment, tested and approved by men of the ranks as well as by great heroes of the sea. It is the seagoing personnel who understand all too well the value and purpose of discipline, the urgent need for rules and regulations. Wars are not won by freelancers, though they may be prolonged by them. In its ultimate refinement, discipline means victory. Discipline and cooperation are a part of the great tradition of the Navy and it is a privilege to preserve and perpetuate these traditions of the past. It is easy to understand why a man in the Navy breathes freer and walks with a firmer step when he recalls that he too is obeying the laws that Rodney, Nelson, and Jones obeyed; that he is under the same discipline that Preble, Decatur, Farragut, and a host of other patriots honored and made illustrious. As one writer has stated: "It ought to give any young man entering the Naval Service a certain thrill of elation that he became the heir of a long and glorious tradition, and that, studying the 'Articles' controlling that Service, he is familiarizing himself with regulations, some of which, couched in almost exactly the same words, were obeyed by John Paul Jones and were read to the ship's company of the '*Bon Homme Richard*'."

16

NAVY REGULATIONS AND CUSTOMS—PART II

A. IMPORTANCE

16A1. Background. In the preceding chapter on Navy regulations and customs the background and history of present-day regulations were discussed. It was pointed out that tradition, custom, and usage established the basic laws of the Navy. The regulations, it was noted, have been compiled throughout the years. They are based on the accumulated knowledge of generations of naval officers and incorporate the basic lessons of experience. Each article has a history behind it and has been drawn up and recorded to prevent the repetition of an error. It was also noted that *Navy Regulations* deals with questions of principle and that the details of methods for applying these principles are discussed in the manuals of the various bureaus and other publications.

Special emphasis was given to Chapter 1, "Articles for the Government of the Navy," which contains the penal code and is frequently called "Rocks and Shoals." It was shown that the "Rules" of 1775 provided the foundation for this chapter and that the discipline of the Navy today rests upon the basic provisions contained therein. The remaining chapters which were referred to briefly, will be the subject of this chapter.

Since *Navy Regulations* represents law and since ignorance of the law excuses no one, it is of utmost importance to know the regulations in order to become good naval officers, and to keep out of trouble. An officer's obligation in this matter is clearly stated in the following article:

Observance of the regulations and all orders. Every officer of the Navy and Marine Corps shall make himself acquainted with, observe, obey, and so far as his authority extends, enforce the laws and regulations for the government of the Navy and the provisions of all orders and circulars emanating from the Navy Department. In the absence of instructions officers will conform to the usages and customs of the naval service. (N.R. art. 76½ (1).)

The "Articles" discussed in the preceding chapter are read to the enlisted men aboard ship once a month, but it is also a wise practice for the officers in addition to reread frequently the chapters that especially concern them. Not only will their task be made easier by the knowledge gained, but also that of their superior officers. No single professional book is as valuable to the inexperienced officer as *Navy Regulations*.

B. CONTENTS

16B1. Introduction to contents. The 54 chapters (to be considered), including some 850 pages, set forth the duty, responsibility, authority, distinctions, and

relations of the various bureaus, offices, and individual officers, each to the other. Here are found varied data such as instructions on procedures ashore and afloat; the organization and administration of naval shore establishments; details regarding naval etiquette; information on appointments, promotions, and retirements; and directives covering many subjects and situations.

A brief survey of the general subject matter as suggested by chapter headings may prove useful at this point. Following the Articles for the Government of the Navy, is a chapter on general instructions to officers; then several chapters deal with rank, command, duty, administration, discipline, honors, distinctions, salutes, and ceremonies. A chapter is devoted to the Navy Department, to shore establishments, the Office of the Chief of Naval Operations, the Judge Advocate General, and one to each of the several bureaus. The Marine Corps receives a brief but pithy chapter. Each of the following topics is covered in separate chapters: the commanding officer of a ship, the executive officer, officers of the deck, division officers, petty officers and crew, ship organization and routine, and the six heads of departments aboard ship. Additional chapters are devoted to supply procedures, personnel administration, maintenance and upkeep. Naval correspondence is covered in a single chapter, reports in another, and the last chapter deals with rules for preventing collisions.

While it is important for every officer to be acquainted with the whole of *United States Navy Regulations*, certain chapters are of particularly vital interest to officers of different specializations. A Marine officer, for example, would be most concerned with Chapter 16, "Marine Corps"; a medical officer with Chapter 32, "Medical Officers"; while an officer in the Supply Corps should be entirely familiar with chapters such as the following: 33, "Officers of the Supply Corps Afloat"; 47, "Money, Pay, and Allowances"; 48, "Accounts and Returns"; and 49, "Sales and Surveys of Material."

Line officers would do well to become thoroughly familiar with no less than fifteen chapters. By number they are 2, 3, 4, 5, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 55. (Some of the material in Chapter 5, "Honors, Distinctions, Salutes, and Ceremonies," will have more immediate application in peacetime. Chapter 55, "Rules for Preventing Collisions," contains the Rules of the Road which may be consulted, perhaps, more conveniently in other publications.)

Obviously no more than a brief introduction to this mass of material can be made in this chapter. One of the best methods of becoming acquainted with *Navy Regulations* is to enroll in the correspondence course (14 assignments) entitled "Navy Regulations and Customs" conducted by the Bureau of Naval Personnel. (See BuPers Circular Letter No. 197-43 (corrected) 27 September 1943.) This chapter may, in no sense, be considered as a substitute for the above thorough and systematic approach to *Navy Regulations*, but it will attempt to outline briefly certain important materials under five general headings: (1) Officers of the Deck; (2) Certain Common Breaches of Regulations; (3) Important regulations for the Young Officer; (4) Navy Regulations: Ordnance and Gunnery Safety Precautions; and (5) Navy Regulations and Discipline.

Any officer reporting aboard ship, regardless of whether he is the Commanding Officer, executive officer, head of a department, or watch and division officer, can find in *Navy Regulations* not only a general description of his duties and responsibilities but much other invaluable information. A brief reference to Chapter 28, "Officers of the Deck," will serve as an illustration.

C. OFFICERS OF THE DECK

16C1. Aboard ship. An officer reporting for duty aboard ship for the first time would be wise to read and reread Chapter 28, "Officers of the Deck." This chapter carefully outlines the varied data which an officer must acquire before relieving the deck; the occasions, at sea, when he may decline to take over the deck; the general duties of the officer of the deck; the reports he is required to make to the Commanding Officer; and his instructions for writing the deck log. A discussion of this chapter will serve as a sample and help to reveal the sort of material found in the pages of *Navy Regulations*.

The responsibilities and authority of the officer of the deck are described in part in the following articles.

Officers of the deck. The officer of the deck is the officer on watch in charge of the ship. The officer of the deck shall be responsible for the safety of the ship, subject, however, to any orders he may receive from the commanding officer.

Every officer or other person on board the ship, whatever his rank, who is subject to the orders of the commanding officer, except the executive officer, shall be subordinate to the officer of the deck. (N.R. art. 1061 (1) (2) (3).)

Salutes, honors, and distinctions. So far as his authority extends, the officer of the deck shall see that the regulations concerning salutes, honors, and distinctions are carefully observed. (N.R. art. 1065.)

To remain on deck and be attentive. He shall remain in charge until regularly relieved, and shall not engage in any occupation which may distract his attention from duty. (N.R. art. 1063 (2).)

16C2. Manner of performing duty. The officer of the deck must have complete knowledge of and adhere rigidly to the policies of the Captain and executive officer. In no position more than that of officer of the deck is eternal vigilance the price of safety. The comfort and contentment of others must receive his due consideration, and he must remember that every request handled is a potential troublemaker if not properly decided. The officer of the deck by his bearing, alertness, scrupulous attention to details of duty, and able manner of discharging authority, is an immediate factor in the efficiency of the ship and an important influence upon the men. These facts are thoroughly recognized in *Navy Regulations*. The manner in which he should perform his duty is described in the following article:

Manner of performing duty. The officer of the deck shall bear in mind that his manner of performing duty has a great influence upon the discipline of the crew and the efficiency of the ship; that he should be dignified, discreet, zealous, energetic, and subordinate, displaying a feeling of deference to superiors and a spirit of kindness to inferiors. He shall himself scrupulously obey all orders and regulations, and require the same of his subordinates. He shall avoid the use of harsh language, and, while never permitting any duty to be performed in a careless, indifferent, or dilatory manner, he shall protect the crew from all unnecessary annoyances.

He shall, when giving orders, use only the phraseology customary in the service, without any unnecessary repetition. He shall use a decided and authoritative tone, sufficiently loud only for the occasion. He shall, when giving orders that are to be repeated or passed, use the exact words proper to pass them, and not permit any changes or additions by his subordinates. (N.R. art. 1071 (1) (2).)

Underway the officer of the deck takes a position on the bridge where he may advantageously determine the proper action for the safe handling of the ship. Here a complete knowledge of the Rules of the Road is absolutely essential. In port his station is on the quarter-deck. There he is distinguished from other officers by his insignia of office described in article 1072:

Insignia of duty. In port the officer of the deck shall wear gloves and carry a spyglass or binocular. (N.R. art. 1072.)

16C3. Care of the ship. The following regulation covering the responsibilities of the officer of the deck underway shows how comprehensive are his duties.

Care of the ship when under way. He shall see that the junior officers and the watch are at all times alert, at their stations, attentive, and ready for duty; that every necessary precaution is taken to prevent accidents; that a boat is always ready for lowering and the life buoys ready for letting go; that the lookouts are in place and vigilant and that they understand their duties. He shall exercise great care that the ship is skillfully steered and kept on her course, and shall keep a correct account of the courses, the speed, and leeway made. He shall see that the running lights are kept bright from sunset to sunrise and their condition reported every half hour; that during a fog, when approaching vessels, and at all other times the precautions required by law to prevent collisions are fully complied with; that when in pilot waters the leads are kept going or that other means to ascertain the soundings are at hand and are frequently used; and that nothing is placed near the compasses that will change their errors. (N.R. art. 1063 (3).)

An officer of the deck is the Commanding Officer's representative. It takes months of actual practice and experience to become a good one. He should have not only a sound basis of technical knowledge combined with forehandedness, vigilance, common sense, leadership, and experience, but must also possess a thorough knowledge of this chapter (28) and others in *Navy Regulations*, as well as certain other pertinent publications. (The small volume, *Watch Officer's Guide*, is an invaluable help to the young officer of the deck.)

D. CERTAIN COMMON BREACHES OF REGULATIONS

16D1. Temperate language in reports. Since this chapter is intended merely as an introduction to *Navy Regulations*, the other chapters in *Regulations* will not be discussed specifically. Instead, a variety of excerpts from different chapters will be given, of which the young officer through inexperience or ignorance is most likely to run afoul.

School is not the only place for passing tests. Whether one likes it or not while in the Navy he is subject to periodic fitness reports. (An enlisted man receives marks semi-annually, which are entered in his service record.) His conduct is under constant surveillance by his Commanding Officer. The Navy Department, however, is extremely fair, for if any part of an officer's fitness report is unsatisfactory the entire report is referred to that officer and he is asked to make a statement regarding the unsatisfactory portion. It is assumed

that the Commanding Officer in his report makes an objective judgment. It is incumbent upon the officer reported on to reply in kind. Some officers, at times however, have unwisely couched their remarks in intemperate language and used the occasion as an opportunity to make counter charges against the officer who made out the report. This irregular practice is contrary to *Regulations*. Others, in making reports or complaints have wandered from known facts and drawn on their imagination for data. This, too, must be avoided. The following article is important:

Reports, complaints, etc., to be in temperate language. Officers making reports or complaints shall confine themselves exclusively to facts; and statements submitted in reply to or in explanation thereof must be couched in temperate language and relate specifically to the matter referred to therein. Officers to whom such reports or complaints are submitted for statement must not reply by making counter charges. Officers desiring to prefer charges against others should make them independently. Opinions must not be expressed, nor the motives of others impugned. (N.R. art. 198.)

16D2. Financial matters. It is well to remember that an officer's actions reflect either favorably or unfavorably upon the uniform and the Navy. There are instances when officers have brought discredit not only upon themselves but upon the service as well, by failing to discharge their just financial obligations. Article 84 definitely points out an officer's duty in this respect.

Incurring debts. Officers serving afloat shall before leaving port pay, or provide for paying, any debts they may have incurred. No officer shall at any time or place contract debts without a reasonable expectation of being able to discharge them.

It is enjoined upon all officers that failure to discharge their just indebtedness brings discredit not only upon themselves but upon the naval service. (N.R. art. 84 (1) (2).)

(Bureau of Naval Personnel Circular Letter, 15 December 1938, referring to all naval personnel, amplifies the above and states that "claims involving reasonable credit for the necessities and essential services of life and the support of dependents" should "be investigated with the idea of satisfying the debt or claim, or of disciplinary action leading to separation of the offender from the service.")

Many officers have been confronted with the awkward problem of deciding what to do when men try to borrow money from them. While they must refuse to lend money to enlisted personnel regardless of the situation, they should, if the need is urgent (perhaps emergency leave because of death in the family), make every effort to get the needed sum in a legitimate way (welfare fund, etc.).

Another problem arises when men ask officers to accept money for safekeeping. The officer must refuse. Such action is not sanctioned by *Regulations* (for exception, see art. 1779) and officers who err may have reason to regret it. Naturally, no officer under any circumstances borrows money from enlisted personnel. Pecuniary dealings between officers and enlisted men are covered in the following article:

Dealings with enlisted men. Officers shall not borrow money nor accept deposits from nor have any pecuniary dealings with enlisted men, except as provided in article 1779, for deposits with the supply officer. (N.R. art. 104.)

16D3. Furthering public order. It is sometimes forgotten that naval officers are not relieved from their military obligations and responsibilities when ashore.

(See article 23. Articles 79 and 80 are important in that they define or imply an officer's responsibility in furthering public order and welfare and set forth certain limitations in his conduct which bear on order and discipline in general.) Officers traveling on trains or moving about in other public places have on occasion, totally ignored disorderly conduct and other offenses committed by enlisted men thus bringing discredit to themselves, the men, and the Navy. Lack of initiative in this respect is an attempt to avoid one's duty. (For the preservation of good order petty officers are also always on duty and are vested with the necessary authority to report and arrest offenders. This authority attaches to them while ashore on liberty. See article 1275(3).) The following articles state the action to be taken:

Officers to suppress quarrels. In the event of a riot or quarrel between persons belonging to the Navy, it shall be the duty of the senior line officer present to suppress the disturbance, and, if necessary, to arrest those engaged in it even though they be his superiors in rank; and all persons belonging to the Navy who may be present shall render prompt assistance and obedience to the officer thus engaged in the restoration of order.

Should there be no line officer present, the senior staff officer of the Navy or of the Marine Corps, who may be present, shall exercise the same authority and be entitled to the same obedience. (N.R. art. 81 (1) (2).)

Offenses committed on shore to be reported. Officers shall report to their immediate superiors all offenses committed by persons belonging to the Navy or Marine Corps, while on shore, which may come under their observation. (N.R. art. 82.)

BuPers Circular Letter No. 74-42, 12 May 1942, Conduct of Naval Personnel on Public Carriers expands the above and reads: There are increasing reports of misbehavior of naval personnel on trains. These reports include intoxication, annoying and disturbing civilian passengers, damaging and defacing railroad equipment, over-running lounge cars on through trains, improper dress or uniform, insubordination and physical attack on train officials, and general obnoxious behavior. In some cases it has been noted that these actions took place in the presence of officers or petty officers who, in place of taking appropriate action, merely ignored the situation. . . . It is directed that immediate necessary action be taken to correct the conditions noted above and that such action include: Warning all naval personnel that failure to take necessary and prompt action to correct any misbehavior of naval personnel on trains or elsewhere will result in disciplinary measures. This applies particularly to officers and petty officers.

16D4. Security of information. That young officers sometimes do not realize the importance of information security is all too evident at the present time. *Navy Regulations* is very definite on this point as disclosed in the following article:

Information that might aid a foreign power forbidden. No person belonging to the Navy or employed under the Navy Department shall convey or disclose by oral or written communications, publications, or any other means, except as may be required by his official duties, any information whatever concerning the naval or military establishment or forces, or any person, thing, plan, or measure pertaining thereto, when such information might be of possible assistance to a foreign power in time of peace, or to an enemy in time of war; or, except by proper naval authority, any information contained in the official records of the Government or otherwise acquired which for reasons of public policy should not be disclosed to persons not of the naval or military establishments. (N.R. art. 113(1).)

The failure of officers to comply with security regulations in regard to classified matter has resulted in strict disciplinary action by the Navy Department. This error is always regarded as a most serious offense.

U. S. Navy Regulations, 1920 (advance change dated 29 March 1944), article 76 (7) (c) (d) reads:

Responsibility for Safeguarding; Reporting of Compromise.

(c) The responsibility for the maintenance of the inviolability of *top secret*, *secret*, and *confidential* matter rests upon each person having knowledge or custody thereof no matter how obtained. Any person having knowledge or suspicion that *top secret*, *secret*, or *confidential* matter has been lost, compromised, or come to the knowledge of unauthorized persons, shall immediately and fully report the facts to the Chief of Naval Operations via his commanding officer. The commanding officer then, if practicable, shall make a thorough investigation of all the circumstances attendant thereto and shall forward the report of the investigation, including statements of all persons concerned, to the Chief of Naval Operations, together with a definite statement giving his opinion as to the responsibility in the case, and the action taken or recommended.

Safeguards—Restricted matter.

(d) The responsibility for the security of *restricted* matter rests upon those persons to whom it is entrusted or disclosed, subject to such special instructions as may be prescribed by the originator or other competent authority. Whenever any person has reason to believe that *restricted* matter has been compromised, he shall notify the administrative head charged with custody of the subject matter, who shall take appropriate action.

16D5. Official correspondence. Inexperienced officers may find themselves in difficulties because (attempting to use short cuts) they fail to send official correspondence through official channels. This is covered in the following article:

Not official if improperly forwarded. No written communication shall be received as official which is not forwarded through the prescribed channels, and with the endorsements of the officers through whom forwarded.

Official channels. Every person in the Navy making an official communication of any kind to any superior authority, other than his immediate commanding officer (except as provided for in art. 2038, par. 2), shall send the same unsealed to his commanding officer, to be by him remarked upon and forwarded. (N.R. art. 2010 (1)(2).)

Officers sometimes forget that official communications intended for officers holding positions with recognized titles must be addressed by title (not by name) and that official correspondence to them and to other public officials must be courteous in tone. Some officers combine several unrelated subjects in the same letter, little realizing the inconvenience which results when several departments are involved in answering the letter. The following regulations clarify these offenses:

Correspondence to be courteous. Official correspondence between officers of the Navy and with officials of the public service should be courteous in tone. (N.R. art. 2004.)

Officials addressed by title only. All official communications intended for officers holding positions with recognized titles shall be addressed to them by title and not by name, as "The Secretary of the Navy," "The Chief of Naval Personnel," "The Commandant," "The Commander in Chief, . . . Fleet (or Squadron)," "The Commander . . . Squadron (or Division)," "The Commanding Officer." (N.R. art. 2007 (2).)

Separate letters on separate subjects. Separate letters shall be written on separate subjects unless the subjects are of like nature. In submitting reports or recommendations relative to repairs, alterations, etc., each vessel will be treated in separate correspondence. (N.R. art. 2021 (2).)

16D6. Duty orders. An officer's application for orders to duty, for revocation or modification of orders must be made according to *Regulations*. It would be quite improper, for example, for an officer to correspond directly with the Detail Office for a change of orders. Both the manner of making such applications and the authority to whom they should be addressed are clearly stated, and any deviation therefrom is improper.

Application for orders. Applications for orders to duty, or for the revocation or modification of orders, shall be made by the officer himself in an official form and through official channels and shall state the precise reason for making the application.

Details, transfers, etc., how made. Appointments, details, transfers, and assignments shall be made on the basis of official records. (N.R. art. 105. (1) (2).)

Applications for duty. Applications for duty and requests for a modification or revocation of orders shall be addressed to the Chief of Naval Personnel or the Commandant of the Marine Corps, as may be appropriate. (N.R. art. 2016 (2).)

Officers sometimes apply in a proper manner for revocation or modification of orders to proceed, and (although able to travel) they then delay without authority, awaiting action on their request. This is forbidden. *Regulations* is specific in regard to such delays.

Not to delay reporting in obedience to orders. An application for the revocation or modification of orders to proceed will not justify any delay in their execution, if the officer ordered is able to travel; and no person shall delay obedience to an order for the purpose of making remonstrance or complaint. (N.R. art. 93.)

When officers are reporting for duty or visiting a command officially, they are required to report to the Commanding Officer as directed in the following articles:

Duty when reporting in obedience to written orders. When officers and others in the Navy or Marine Corps report for duty in accordance with written orders they shall present the orders to the officer to whom they report.

Officers shall indorse upon the orders of those who report to them the fact that the person ordered has reported for duty, and the date and place at which he so reported. (N.R. art. 133 (1) (2).)

When visiting a command. Officers visiting a command in the performance of any official duty connected therewith shall report to the commanding officer. (N.R. art. 88.)

16D7. Uniform regulations. The indulgence of carelessness and irregularity regarding the uniform has resulted in embarrassment to naval officers. Wearing of civilian clothes on the street at this time (wartime) is forbidden unless specifically authorized. The directives which cover this subject and govern naval personnel are as follows:

Conformance to uniform regulations. All persons belonging to the Navy must strictly conform to such regulations for uniforms as may be published from time to time by the Navy Department. (N.R. art. 122 (1).)

(The following directive is effective at this time (AlNav 29-42 30 January 1942 AlNav 143-1941 cancelled): Hereafter uniform will be worn at all times except when engaged in exercise or except in the home with less than 3 guests present.—SecNav. Frank Knox.)

Watch fobs, fraternity pins, and other jewelry or unauthorized ornaments exposed on the uniform are forbidden by the following directive:

Pins and Jewelry. No watch chains, fobs, pins, or other jewelry shall be worn exposed upon the uniform by any officer or enlisted man of the Navy, except sleeve buttons, and shirt studs as prescribed, and the authorized decorations, medals, and ribbons. (U. R. 1-15.)

Young officers would do well to remember that "studied negligence" applied to dress or hair is no longer a virtue.

The Hair and Beard. The hair, beard, and mustache shall be neatly trimmed. The face shall be kept clean-shaved, except that a mustache, or beard and mustache, may be worn at discretion. No eccentricities in the manner of wearing the hair, beard, or mustache shall be permitted. (U. R. 1-16.)

16D8. Saluting. Young officers frequently become careless about saluting, little realizing that laxity in this respect creates a most unfavorable impression and reflects poorly on the individual guilty of this breach of naval etiquette. The rendering of salutes is considered one of the fundamental steps in discipline. Failure to carry out the *Regulations* in this respect leads to other dereliction, is non-military, and undermines the morale of the service. Article 266 reads:

Personal salutes between personnel of the Navy and other services. Salutes shall be exchanged between officers and between officers and enlisted men on every occasion of their meeting, passing near, or being addressed, except as indicated in article 267. Juniors shall always salute first. When several officers in company are saluted, all shall return the salute.

Salutes and other marks of respect due their rank shall be extended to officers of the Navy, Army, Marine Corps, and Coast Guard, to foreign military and naval officers whose governments are formally recognized by the government of the United States, and, when on active duty, to officers of the Naval, Army, and Marine Corps Reserve, and National Guard.

The official salute to any person, by all officers and enlisted men with no arms in hand, whether on or off duty, shall be the hand salute rendered only when head dress is worn, using the right hand when possible.

The salute, when covered, with arms in hand shall be the appropriate salute prescribed for the particular arm that is at the time in hand. (N.R. art. 266 (1) (2) (3) (4).)

Officers sometimes fail to render the proper salute when reaching the quarter-deck aboard ship. The proper procedure is described in article 265 as follows:

Salutes to colors and quarter-deck. All officers and men, when reaching the quarter-deck either from a boat, from a gangway, from the shore, or from another part of the ship, shall salute the national ensign. In the event the ensign is not hoisted this salute shall be tendered only when leaving or coming on board ship. In making this salute, which shall be entirely distinct from the salute to the officer of the deck, the person making it shall stop at the top of the gangway, or upon arriving upon the quarter-deck, face the colors, and render the salute, after which the officer of the deck shall be saluted. In leaving the quarter-deck, the same salutes shall be rendered in inverse order. The officer of the deck shall return both salutes in each case, and shall require that they be properly made.

The commanding officer shall clearly define the limits of the quarter-deck; this area shall embrace so much of the main or other appropriate deck as may be necessary for the proper conduct of official and ceremonial functions. When the quarter-deck so designated is forward and at a considerable distance from the colors, the salute to the colors prescribed in the preceding paragraph will not be rendered by officers and men except when leaving or coming on board the ship. (N.R. art. 265 (1) (2).)

16D9. Exchanging duty. Inexperienced officers sometimes get into difficulties because they absent themselves from duty or exchange duty without permission from the proper authority. Article 106 of *Regulations* is clear on this point:

Exchange of and absence from duty. An officer shall not, without authority from his commanding officer or other superior, absent himself from his duty or exchange duty with another. (N.R. art. 106.)

16D10. Language concerning superiors. Officers should always remember that it is contrary to *Regulations* to use language which may tend to diminish the confidence or respect due to a superior. Furthermore, an officer who hears such language has certain obligations. This subject is clearly explained in the following article:

Language reflecting upon a superior. No officer shall use language which may tend to diminish the confidence in or respect due to a superior in command; and it is the duty of

every officer who hears such language to endeavor to check it and to report the same immediately to his superior. (N.R. art. 96.)

16D11. Communications to Congress, etc. *Navy Regulations* is very definite on the question of officers combining for the purpose of influencing legislation, remonstrating against orders, or complaining about details of duty. The following articles indicate definitely the officers' responsibility regarding communications to Congress:

Combinations for certain purposes forbidden. Combinations of officers for the purpose of influencing legislation, remonstrating against orders, or complaining of details of duty, are forbidden. (N.R. art. 92.)

All communications to Congress shall pass through the department. All petitions, remonstrances, memorials, and communications from any officer or officers of the Navy or Marine Corps, whether on the active or retired list, addressed to Congress, or to either House thereof, or to any committee of Congress, on any subject of legislation relating to the Navy or Marine Corps, pending, proposed, or suggested, shall be forwarded through the Navy Department, and not otherwise, except by authority of the department. (N.R. art. 94.)

16D12. Alcoholic liquors. *Navy Regulations* specifically controls the use of alcoholic liquors within its jurisdiction and forbids the use of intoxicants by personnel while on duty. The rules in respect to intoxicants cannot be too greatly emphasized. The violation of the following two articles has resulted in numerous courts-martial:

Alcoholic liquors. Alcoholic liquors shall not be admitted or used on board any ship or aircraft of the Navy except as authorized for medical purposes.

The introduction, possession, or use of alcoholic liquors for drinking purposes or for sale is prohibited within navy yards, marine barracks, naval stations and other places ashore under the jurisdiction of the Navy Department which are located in States, Territories or insular possessions in which the possession or use of such liquors for drinking purposes is not permitted by law. (N.R. art. 118 (1) (2).)

The above does not preclude the use afloat or ashore by Navy chaplains of sacramental wine for religious purposes or the forwarding via official channels of sacramental wine to be used for this purpose. (See SecNav ltr. Op-13c/wlh, Serial 150813, SO7 1 40, 20 July 1943.)

The following AlNav (208-44) is concerned with the handling of beer and ale. They may be:

- A. Transported as cargo in naval vessels when consigned to overseas bases.
- B. Transported as ship's store or Ship's Service stock in any naval vessel preceding to forward areas for sale to ship's personnel sent ashore at isolated points not having adequate recreational facilities.
- C. Sold or consumed ashore at activities under naval jurisdiction in Ship's Service stores, post exchanges, ship's stores (only at those activities having no Ship's Service store), and organized officers' or enlisted men's clubs.

Beer sold in foregoing activities shall not be transported off naval reservations except by special agreement with local authorities. Under no circumstances will beer be sold or consumed aboard any naval vessel.

Subject to the above interpretation, article 118, *Navy Regulations*, 1920, shall continue to apply.—*SecNav. James Forrestal.*

The following article is concerned with the use of intoxicants while on patrol duty.

Intoxicants. No officer or man who is on patrol duty with liberty parties ashore shall at any time while on such duty, under any circumstances whatever, partake of or indulge in any form of intoxicating liquor or other form of intoxicant or narcotic (except tobacco), under

proper circumstances) whatever while on such duty. The senior patrol officer shall see that the provisions of this paragraph are strictly observed, and shall promptly report to the commander in chief, in writing, all violations of it that may come to his notice. All officers and men of the patrol shall report to the senior patrol officer all violations of the provisions of this paragraph on the part of those under them. (N.R. art. 698 (4).)

16D13. Trade; gratuities. That officers are forbidden to engage in trade either aboard ship or at any navy yard, naval station, or marine barracks is clearly stated in article 85 (2).

Engaging in trade. No person in the naval service shall, without proper authority, either for himself or as an agent, engage in trade or introduce any article for the purposes of trade on board any vessel of the Navy or at any navy yard, naval station, or marine barracks. (N.R. art. 85 (2).)

(With the great influx of naval reservists (with business interests) into the Service because of the present war, another directive appeared in the *Bureau of Naval Personnel Manual* (1942). When so placed on active duty, it is expected that officers and men will devote their whole time to naval duties and shall not engage in private employment, except in such cases as may be specifically authorized by the Bureau of Naval Personnel. (BuPers Manual H-1707 (3).)

Regulations will not permit naval personnel to receive gratuities from contractors and others. Violations of this regulation have brought unfortunate results.

Gratuities from contractors. No person employed in the Navy or under the Navy Department shall take or receive, directly or indirectly, any emolument or gratuity from any contractor or other person furnishing supplies, or act as agent or attorney for such person. (N.R. art. 101.)

E. IMPORTANT REGULATIONS FOR THE YOUNG OFFICER

16E1. Miscellaneous articles. The following articles from *Regulations* contain information of a miscellaneous nature with which young officers should be familiar.

1. An officer is sometimes faced with contradicting or conflicting orders from superiors and is uncertain as to the proper step to take. This problem is covered in the following article:

An order received contradicting or conflicting with another. If an officer receives an order from a superior annulling, suspending, or modifying one from another superior, or one contrary to instructions or orders from the Secretary of the Navy, he shall exhibit his orders, unless confidential and he has been forbidden to do so, and represent the facts in writing to the superior from whom the last order was received. If, after such representation, the latter shall insist upon the execution of his order, it shall be obeyed, and the officer receiving and executing it shall report the circumstances to the superior from whom he received the original order. (N.R. art. 89 (2).)

2. There are three general types of orders an officer may receive and *Regulations* carefully explains the meaning of each.

Duty upon the receipt of orders. An order from competent authority to an officer of the Navy or Marine Corps requiring him to proceed to any point, or to report for duty at a place not involving travel, but fixing no date and not expressing haste, shall be obeyed by reporting within four days, exclusive of travel time, after its receipt. If the order read "without delay," he shall report within 48 hours, exclusive of travel time, after its receipt; if "immediately," within 12 hours, exclusive of travel time, after its receipt; and all officers shall indorse on their orders the date and hour of their receipt. The foregoing allowances of time do not apply to any provisions of an officer's orders requiring him, after performing the duty specified, to return to his regular station or to proceed on further duty. Any delay in carrying out orders

which may be granted to an officer of the Navy or Marine Corps by competent authority will be additional to the time allowed above. (N.R. art. 132.)

In connection with detachment from one ship or station and transfer to another, the following is the interpretation by the Bureau of Naval Personnel of phraseology used in such orders:

a. When the term "hereby detached" is used, it is intended that, if possible, the commanding officer detach the officer concerned within 24 hours after the orders are received on board.

b. When the term "on or about" is used, it is intended that the commanding officer will have a discretionary period of 10 days on either side of the given date in which the officer to whom the orders are addressed may be detached.

c. When the term "detached in time to proceed and report" on a certain date is used, the latest or limiting date of detachment, if the ship's location permits, will be 4 days plus the required travel time in advance of the specified reporting date.

d. When the term "when directed detached" is used the officer should be detached within ten days of receipt of orders.

e. When the term "when relieved detached" is used it is not necessary to detach the officer until his relief has been properly instructed in his new duties, and the commanding officer feels that the relief is competent to relieve the officer being detached.

f. When the term "upon the reporting of — — — detached" is used the officer should be detached within 24 hours of reporting of — — —.

3. The following regulations with respect to national anthems should be noted:

The National Anthem. The composition consisting of the words and music known as "The Star Spangled Banner" is designated the National Anthem of the United States of America.

Honors to the National Anthem. Whenever the national anthem is played all officers and enlisted men of the Navy shall stand at attention facing the music unless at colors when they shall face the ensign. In boats, only the boat officer, or in his absence the coxswain, shall stand and salute; other members of the crew and passengers who are already standing shall stand at attention, all others remain seated (arts. 254 (7), 286). If in uniform, covered, they shall salute at the first note of the anthem, retaining the position of salute until the last note of the anthem. Men in ranks shall salute only by command (art. 246 (2)). If not in uniform and covered, they shall uncover at the first note of the anthem, holding the headdress over the heart and so remain until the last note except that in inclement weather the headdress may be raised slightly and held above the head.

When played by a naval band, the national anthem shall be played through without the repetition of any part not required to be repeated to make it complete.

Honors to a foreign national anthem. The same marks of respect prescribed for the observance during the playing of the National Anthem of the United States shall be shown toward the national anthem of any other country, formally recognized by the government of the United States (art. 245).

The playing of the National Anthem of the United States or of any other country as a part of a medley is prohibited. (N.R. art. 230 (1) (2) (3) (4) (5).)

4. Before leaving the ship a junior officer is required to obtain permission from the executive officer or his representative. (Enlisted personnel have "liberty," while the parallel for officers is "shore leave." Written "leave" is granted both officers and enlisted personnel.) Custom requires that an officer must be on

board for a period of four hours prior to his watch. While it is not necessary to state one's destination or mission when leaving the ship the following article has a limiting provision.

"Leave of absence" defined. Permission granted orally to leave the ship or station temporarily, instead of formally authorized leave of absence, does not convey permission to leave the general vicinity of the port or station, unless especially so stated. Absence authorized in this manner shall not continue on the following day beyond forenoon quarters on board ship or the beginning of working hours at a shore station, unless an extension beyond such hour has been specifically authorized. (N.R. art. 1725.)

5. There are definite rules governing mess procedure, and an officer will find it of value to know these rules before the need arises aboard ship for using them. The rules, all of which are found in *Navy Regulations*, cover such questions as: Is an officer ever allowed to eat his meals in his room? Who presides over the mess? On what basis are seats assigned at the mess table? When should mess bills be paid? Are the so-called cigar messes allowed? Is a rebate ever given in case of absence from the mess due to detached duty, leave, or hospitalization? The following articles deal with rules concerning conduct of the mess:

Messing of officers. Officers shall mess in the apartments assigned therefore, except as hereinafter provided. Separate messes shall not be formed in the same apartment, nor shall meals be taken in rooms or other places than at the regular mess table, except in case of sickness.

The commanding officer and other officers attached to a receiving ship shall live and mess on board unless specifically exempted by the Secretary of the Navy. (N.R. art. 1435 (1) (2).)

(Officers at present are frequently subsisted in general messes aboard ship and outlying bases. See AlNav No. 63 of 20 March 1944.)

Senior line officer to preside. In all officers' messes the senior line officer present in line of succession to the command shall preside and have the power to preserve order, except that in those vessels where provision is made for separate warrant officers' messes the senior line officer present in those messes shall preside and have such power (art. 81).

When no line officer in succession to the command is present, the senior officer present, whether of the staff or of the Marine Corps, shall preside.

The officers of the mess shall be assigned permanent seats at the mess tables alternately, in the order of rank, to the right and left of the presiding officer, except that the seat opposite that of the presiding officer shall be occupied by the mess treasurer.

Wardroom officers may form a "cigar mess," of which all commissioned and warrant officers attached to the ship may become members upon payment of mess entrance fee; but no officer shall be required to become a member thereof. Suitable locker room for wardroom cigar mess stores shall be provided when fitting a ship for sea. (N.R. art. 1438 (1) (2) (3) (4).)

Mess treasurer. Each officers' mess shall elect a mess treasurer, who shall have charge of all matters relating to the service and expenditure of the mess, and of Government property in use by the mess. All officers of a mess except officers charged with the custody or disbursement of public funds are eligible to election as mess treasurer, and if elected shall so serve; but no officer shall be required to serve more than two months consecutively. (N.R. art. 1439 (1).)

Mess bills. Every officer attached to a seagoing ship shall pay monthly, in advance, the full amount of the mess bill to the mess treasurer; and no officer shall be excused from such payment except as provided in the succeeding paragraphs of this article.

An officer ordered on detached duty or sent to a hospital shall be entitled to a rebate of the full amount of his mess bill for the period of his absence. An officer ordered temporarily to duty away from the ship to which he is attached, so that he does not avail himself of the privileges of the mess during such absence, is "ordered on detached duty" within the meaning of this paragraph, even though such duty should be "in addition to his present duty."

An officer granted leave of absence for more than ten days, including travel time, shall be entitled to a rebate of one-half the amount of his mess bill for the period of his actual absence; but no such rebate shall be allowed for a period of actual absence of ten days or less. (N.R. art. 1440 (1) (2) (3).)

6. When a young officer is assigned a certain room aboard ship, he may wonder just how he happened to be given that particular room. *Navy Regulations* states specifically the method of assigning living quarters, and several other related problems, such as: Who are wardroom officers and who are junior officers? May a room specifically designated on the plans for a particular officer, if not needed, be occupied by another officer? When a high ranking officer is embarked as a passenger, is he entitled to a stateroom to the exclusion of a junior officer belonging to the ship's complement? Where do officer-passengers mess? In this connection, the following articles are pertinent.

Wardroom officers. All commissioned officers not in command, above the rank of ensign, shall be wardroom officers. Ensigns assigned to duty as watch and division officers, either on deck or in the engineer department, shall also be wardroom officers. (N.R. art. 1428.)

Junior officers. Ensigns not watch and division officers, second lieutenants in the Marine Corps not in command of detachments, and officers of the Supply Corps having the rank of ensign and not regularly assigned to duty as supply officer of the ship are junior officers and shall occupy the junior officers' quarters. (N.R. art. 1431.)

Assignment of officers' quarters on board ship. The assignment of officers' quarters on board ship shall be in accordance with the plans of the ship, as approved by the department. The plans shall show the quarters assigned to the captain, to the executive officer, to the heads of departments, to the commanding officer of the marine detachment, to the chaplain, to other wardroom officers, and, if the size and type of the ship warrants, to junior and warrant officers. The plans of ships designed as flagships shall show, in addition, the quarters assigned to the admiral, the chief of staff, and to the senior officers of the staff.

Rooms not specifically designated on the plans shall be assigned by the commanding officer, having due regard for the relative rank of the officers concerned and the desirability of permanence of quarters assigned to watch-standing officers.

Rooms specifically designated on the plans may be occupied by other officers, but they shall be vacated when needed by the officers for whom they are designated. (N.R. art. 1429 (1) (2) (3).)

Passengers. No officer embarked as a passenger shall be entitled to a stateroom to the exclusion of an officer belonging to the complement of the ship. (N.R. art. 1433.)

Officers as passengers. Officers embarked as passengers shall mess in the apartment to which they would belong if attached to the ship. (N.R. art. 1437.)

7. Ignorance of the rules governing leave is never acceptable as an excuse if an officer returns late from leave. The wise officer will know exactly, *before he goes on leave*, when the leave starts and when it is considered officially terminated. An officer on duty in England, on being granted one month's leave in the States, will want to know whether such leave starts officially on the day he leaves his ship or station, or whether it is counted from the day he arrives in the United States. An officer who was on duty until noon before starting a seven-day leave from his station will want to know whether the day of departure will count as a day of leave. The same question will arise concerning his return from leave. Reference to the following articles will remove all doubt on such matters.

Leave from duty abroad. If an officer be on duty abroad, or on a foreign station, and be granted leave for the purpose of visiting the United States, his leave begins from the date of his arrival therein, and expires on the date of his departure therefrom, and the dates of such arrival and departure must be reported to the department.

Manner of counting length of leave. Leave of absence shall be granted in terms of months and days, as "one month," "one month and ten days." A leave of absence begins on the day following that on which an officer departs from his station or duty. The day of departure, whatever the hour, is counted as a day of duty; the day of return as a day of absence; except when such return is made before the regular hour for forenoon quarters on board ship or for beginning work at a shore station, in which case it shall not be counted as a day of absence. Leave for one month beginning on the first day of a calendar month, shall expire on the last day

of the month, whatever its number of days. Beginning on an intermediate day, the leave will expire on the day preceding the same day of the next month. (N.R. art. 1727 (2) (3).)

8. It is important to know *Regulations* in regard to objections raised by the crew in respect to the quality of the provisions issued to them. This problem is covered in article 1407 as follows:

Provisions alleged to be unfit for issue. If any of the crew object to the quality of the provisions issued to them, the supply officer shall at once request a survey. If, in the judgment of the surveying officer, the provisions are of proper quality, they shall be issued, notwithstanding objections, unless the commanding officer shall direct otherwise. If, however, the provisions are not approved, others of a better quality shall, if on board, be at once issued in their stead. (N.R. art. 1407.)

9. The duties of the Commanding Officer in case of the loss of the ship are described in article 841. Paragraphs (1), (2), and (3) follow:

Loss of the ship. In case of the loss of the ship, her commanding officer shall remain by her with officers and crew as long as necessary and save as much Government property as possible. Every reasonable effort shall be made to save the log book, muster roll, accounts of officers and crew, and other valuable papers.

The captain last to leave. If it becomes necessary to abandon the ship, he should be the last person to leave her.

He shall make a report of the circumstances to the Secretary of the Navy as soon as possible, and if wrecked within the United States shall repair to the nearest naval station with the crew of the ship. (N.R. art. 841 (1)(2)(3).)

10. It is well for an officer to realize the importance of the petty officer's place aboard ship. He is as much a leader in his realm as is the commissioned officer in his, and the required attributes of leadership are much the same. A high standard of efficiency ought to be expected and relentlessly exacted from him.

A petty officer's responsibilities are outlined in *Navy Regulations*. He is required to adhere rigidly to the dignity and responsibility of his rating, and should be assisted in these particulars in every way by his officers. He should be given responsibility. An officer should rarely if ever reprimand an unrated man for mistakes, but should deal directly with the petty officer. The petty officer is clothed with full authority for the execution of the duties of his office by custom and by *Navy Regulations*.

Petty officers. Petty officers shall show in themselves a good example of subordination, courage, zeal, sobriety, neatness, and attention to duty.

They shall aid to the utmost of their ability in maintaining good order, discipline, and all that concerns the efficiency of the command.

For the preservation of good order petty officers are always on duty and are vested with the necessary authority to report and arrest offenders. This authority attaches to them while ashore on liberty.

When an enlisted man is appointed petty officer, the commanding officer shall bring to his attention the provisions of this article. (N.R. art. 1275 (1)(2)(3)(4).)

11. The manner in which Sunday is to be observed in the Navy is clearly stated in *Regulations*. No work may be performed on that day and this includes target practice, drills, inspections, and all other ship activities. ("Works of necessity" aboard ship however are excepted and vessels engaged in training the Naval Reserve are not so bound.) When an "emergency" develops on Sunday and work is required, a report must be made to the Navy Department explaining the occasion which made the "emergency" necessary. Of course, during war, the Navy is always in a state of emergency.

Further it is directed that no secular work is to be allowed to interfere with the holding of divine services; that a suitable compartment be made available for such services; and that good order be maintained throughout the ship during this period. Assistance and encouragement is to be given to the chaplain in the conduct of services and, where no chaplain is attached to the ship, the Commanding Officer is directed to arrange for a visiting naval chaplain to come aboard. If this is not possible, he is to invite, if practicable, a competent clergyman from ashore to conduct religious services. A few of the articles dealing with Sunday observance follow:

Commanding officers and others officially concerned will see to it that aboard ships and on shore stations to which they are attached no work of any character whatsoever is performed on Sunday, except works of necessity.

This order will be construed as embracing target practice, and drills of every character, inspection of ship and crew, clothing inspection, issuing of small stores, and all other ship activities that violate the letter and spirit of this order.

No vessel of the Navy shall begin a cruise on Sunday, except in case of emergency.

In order to insure the regular performance of divine services aboard the vessels of the United States Navy, and at shore stations, it is further ordered that in no instance shall secular work be allowed to interfere with the holding of divine services, and that every possible assistance and encouragement be given our chaplains in the conduct of such services. A suitable compartment or room shall be designated for this purpose, and properly rigged for the occasion, and orderly quiet be maintained throughout the ship during divine services. The ship's band shall always be made available for use at divine service.

When there is no chaplain attached to his ship or station, the commanding officer will arrange for and give every possible assistance to any naval chaplain in squadron, or adjacent, or available who might be able to come aboard for such purpose. In case it is impossible to secure the services of a regular Navy chaplain, it is directed that commanding officers, when practicable, invite competent clergymen from ashore to come aboard and conduct religious services.

In all cases where Sunday work is required because of "emergency," report shall be made to the department as to the occasion making the "emergency" necessary.

The provisions of this article shall not apply to vessels engaged in training the Naval Reserve. (N.R. art. 141 (1)(2)(3)(4)(5)(6)(7).)

Extra duty as punishment shall be discontinued on Sunday. (N.R. art. 214.)

Smoking during divine service is forbidden. (N.R. art. 1328 (2).)

See also article 1298 (5)(6).

12. The behavior of naval personnel when in foreign lands is an important factor in our friendly relations with these countries. *Navy Regulations* is specific in delineating the conduct demanded of Navy men and in pointing out their duties when visiting other countries. It directs that foreign religious institutions and customs be respected; that due deference be shown the local laws, customs, ceremonies, and regulations; that all possible cause of offense to the authorities and inhabitants be avoided and further that a feeling of good will and mutual respect be cultivated. The following articles deal with this important subject.

Foreign religious institutions. The religious institutions and customs of foreign countries visited by ships of the Navy must be respected. (N.R. art. 117.)

Dealings with foreigners. The commander in chief shall impress upon officers and men that when in foreign ports it is their duty to avoid all possible causes of offense to the authorities or inhabitants; that due deference must be shown by them to the local laws, customs, ceremonies, and regulations; that in all dealings with foreigners moderation and courtesy should be displayed, and that a feeling of good will and mutual respect should be cultivated. (N.R. art. 727.)

13. An officer joining a ship is required by *Regulations* to make a call on the Commanding Officer within 48 hours after reporting on board. When arriving outside the Captain's cabin, it is perfectly correct to say to the orderly, "Tell the Captain that Ensign —— would like to pay his respects." The cap is removed upon entering the cabin. Custom dictates that normally this call should last about ten minutes. It is clear that naval etiquette, in this instance, is governed by both regulation and custom. The article reads:

Official visit to own commanding officer. An officer joining a ship or station shall, in addition to reporting for duty, make an official visit to his commanding officer or commandant within 48 hours after joining. (N.R. art. 272 (3).)

14. Every officer of the Navy and the Marine Corps is required by *Regulations* to make certain reports in respect to his usual residence, address of wife or next of kin, etc. Article 135 (1 and 2) reads:

Usual residence of officers. Every officer of the Navy or the Marine Corps shall keep the Bureau of Naval Personnel or the Commandant of the Marine Corps, respectively, informed of his usual residence and of the address of his wife or next of kin.

No officer on the active list shall change his usual residence without permission of the Bureau of Naval Personnel or the Commandant of the Marine Corps. (N.R. art. 135 (1)(2).)

Bureau of Naval Personnel Manual, 1942 (H-1802) reads: (4) An officer of the Naval Reserve shall report any change of official residence to the Bureau of Naval Personnel via the commanding officer of his organization and the Commandant of the naval district in which his records are carried, if not on active duty, or if on active duty, via his commanding officer.

15. *Navy Regulations* clarifies the relationship between the Marine Corps and the Navy. Because the Marine Corps fought both on land and sea, and because the lines of jurisdiction were not clear, friction developed in our early history between the Army and the Navy. Since 1834 the Marine Corps has been subject at all times to the regulations of the Navy (except when detached for service with the Army by order of the President) and is now definitely a part of the naval service. Article 552 (2) reads:

Subject to regulations for the government of the Navy. The Marine Corps shall at all times be subject to the laws and regulations established for the government of the Navy, except when detached for service with the Army by order of the President; and when so detached they shall be subject to the rules and articles of war prescribed for the government of the Army. (N.R. art. 552 (2).)

16. It is sometimes not realized that the rules for preventing collisions at sea are part of *Navy Regulations* and constitute Chapter 55. These rules have been enacted into law by Congress. They have the force of law and of *Navy Regulations* and are, therefore, mandatory. For officers and petty officers of the line these rules are of vital importance and should be so familiar that in a collision situation the officer would act automatically and with lightning speed to the proper decision. Section one, paragraph two (Chapter 55) reads:

Officers and others in the naval service shall diligently observe the rules for preventing collisions, as given in this chapter, and shall immediately report to the Navy Department any infraction thereof which may come to their notice, giving in detail in such report all the data obtainable in connection therewith, including the names of all witnesses, times, places, and the names and nationalities of the vessels violating them.

17. Training in first aid among officers and men on board ship is covered in *Regulations* and is an essential factor in the part played by the Medical Department in preparing for battle. This is made necessary because, during an actual engagement, members of the Medical Department are assigned stations which may not be accessible to all members of the ship's personnel. Due to the isolation of each compartment during battle it is often difficult to get the wounded to first-aid stations expeditiously and it devolves upon the personnel at the spot to give the first treatment and on them often depends the life of the patient. It is therefore vitally important that all hands be conversant with the rudiments of the first-aid treatment to be given a wounded man. In the following articles, *Navy Regulations* states clearly the responsibility of the medical officer for this training in first aid.

At general quarters and at special exercises, with the approval of the commanding officer, the medical officer shall distribute a sufficient number of first-aid appliances for all requirements and frequently advise divisional officers as to the use of these appliances, as provided for in article 1346. (N.R. art. 1155.)

(1) In order that all officers and enlisted personnel in the naval service may be properly drilled in first aid, instructions therein shall be given to the crew and the divisional officers by the medical officer.

(2) This instruction shall include:

- (a) Handling, lifting, and transportation with and without stretcher.
- (b) Control of hemorrhage.
- (c) Application of occlusive dressings.
- (d) Resuscitation of the apparently drowned and of the electrically shocked.
- (e) Control of shock and pain.
- (f) Emergency treatment of burns and chemical and gas injuries.
- (g) Splinting and lifting for fractures of long bones and spine.

(3) This instruction shall be given at frequent intervals but not less than quarterly for the entire crew, and care shall be exercised that all divisions are thoroughly instructed.

(4) The Bureau of Medicine and Surgery will issue detailed information covering the above points. The necessary dummy dressing shall be supplied by the ship or station. Divisional officers shall be cognizant of the degree of first aid knowledge in their divisions. (N.R. art. 1346.)

18. Today many junior officers are in command of ships of the Navy. It is well, therefore, to point out the duties and obligations of junior commanding officers when meeting seniors either at sea or in port. The following articles describe in some detail the procedure to be followed by junior commanding officers when falling in with seniors. The circumstances under which the senior officer may divert or detain forces not under his immediate command should be noted.

Junior to show orders. When ships meet in port, the junior commanding officer of one or more ships shall, if circumstances permit, call upon the senior commanding officer of one or more ships, show all the orders not secret under which he is acting, and inform him of the condition of his command. For the time being he shall consider himself subject to the authority of such senior (N.R. art. 799.)

To obtain permission of the senior to perform evolutions, etc. A junior in command must, when meeting a senior, either at sea or in port, obtain permission by signal or otherwise to continue on his course, to anchor or get under way, to communicate with the shore, or to perform any evolution or act of importance which would require the permission of his commander in chief, if the latter were present. (N.R. art. 800.)

When the senior officer may divert or detain forces not under his immediate command.

(1) The senior officer present shall not, in the absence of special instructions, take advantage of his superior rank to detain or divert from their destination the whole or any part of any forces which he may fall in with. His authority to do so, however, must be recognized without question and should the public interests imperatively demand it, he may employ temporarily the ships which he meets. If the commanding officers of these ships have special

instructions which forbid their being diverted from their course, they must inform the senior officer present, in order that he may give such instructions due consideration.

(2) As soon as the cooperation of these ships ceases to be imperative, he shall order them to continue the service on which they were engaged when he met them, unless circumstances in the meantime render this inexpedient.

(3) He shall limit the exercise of command over training ships and other special service ships to such general matters of naval routine, discipline, and official intercourse as shall not interfere with the special service upon which they are employed. (N.R. art. 801 (1) (2) (3).)

19. When a vessel of the Navy, or a vessel manned by naval personnel comes into collision with a merchant vessel, a public vessel of one of our Allies, a public vessel of a neutral nation, a floating object, wharf or other land structure, all original documents and records relating to or recording the occurrence are to be preserved. The importance of and the necessity for this procedure are explained in the following articles.

Investigation in collision cases. (1) The provisions of Naval Courts and Boards with respect to an investigation of a collision will be observed. (N.R. art. 804B (1).)

Preservation of original data in collision cases. (2) When a vessel of the Navy, or a vessel manned by naval personnel, comes into collision with a merchant vessel, a public vessel of one of our Allies, a public vessel of a neutral nation, a floating object, wharf or other land structure, all original documents and records relating to or recording the occurrence of such a collision or damage are to be preserved. A soon as practicable after the collision the above documents together with the name and rank or rating of every witness and his station at the time of collision, and whose testimony would be of value relative thereto, shall be forwarded to the Judge Advocate General via the Bureau of Naval Personnel, with copy of letter of transmittal being sent directly to the Judge Advocate General. When the specific documents shall have served their purpose in the protection of the Government's interest, they shall be deposited in the Bureau of Naval Personnel or in the Bureau of Ships as is appropriate. This procedure is intended to avoid later inquiry and search for original documentary material required in admiralty litigation.

(a) The following shall be included in the data furnished the Judge Advocate General: the original record of entry in the deck and engine departments, such as the rough engine room log or rough deck log; smooth copies of such log books; the engine room and bridge bell books; the quartermaster's notebook; the chart actually in use at the time of the collision; the bearing record book; the gyro course record when such a record is available, and the night order book. Where there can be any issue of proper course in any ensuing collision litigation the deviation data, azimuth records, etc., shall also be forwarded. Copies of such parts of the original documents specified above as may be required for ship's use shall be made and kept on board.

(b) If the entries recorded were, in the first instance, made in a separate notebook or on slips of paper, these should be similarly preserved. It is very important that all original records of the first instance be forwarded with the other required data. A copy, certified by a Navy officer, does not, in the federal courts, have the same standing as the original document and such certification does not dispense with the necessity for the production of the original record.

(c) No erasures should be made, for any purpose, in a log book or on a sheet or original entry of navigation records. If the entry is to be corrected, the original should be lined through and the correction inserted in such a manner that no question can arise as to the nature of the original entry which is being corrected. (See article 1317.) (N.R. art. 804B (2) (a) (b) (c).)

20. Officers sometimes feel mistreated because they are assigned to duty other than that for which they have expressed a preference. Even in wartime, the Navy Department endeavors to grant individual requests for a particular type of duty. Nevertheless this is not always possible and the Navy Department is under no obligation to do so.

Duty performed. Officers of the Navy shall perform such duty at sea or on shore as may be assigned them by the department. (N.R. art. 161.)

21. Officers are sometimes surprised to find that certain naval "customs" which they are obeying are actually written in the form of regulations. Two examples will illustrate.

Juniors to give way to seniors. In accompanying other officers, juniors shall walk or ride on the left of their seniors, unless there be special reason for the contrary.

Unless otherwise directed by the senior officer present, officers will enter boats, automobiles, or other vehicles in inverse order of rank and will leave them in order of rank. The seniors will be accorded the most desirable seats. (N.R. art. 268 (3)(4).)

F. NAVY REGULATIONS: ORDNANCE AND GUNNERY SAFETY PRECAUTIONS

16F1. General. It was stated previously that the regulations incorporate the basic lessons of experience and that each article has a history behind it and has been drawn up and recorded to prevent the repetition of an error. In no part of *Navy Regulations* is this more true than in the pages devoted to ordnance and gunnery safety precautions. In the present *Navy Regulations* there are more than a hundred such precautions and more than a dozen pages devoted to this subject. Most of these are of comparatively recent origin, having grown up with modern ordnance and smokeless powder. According to one authority the majority of these precautions unfortunately are the outcome of appalling disasters in our own and other navies, which have caused many horrible deaths and injuries.

A few of these disasters occurring since the turn of the century and the lessons they taught will serve as illustrations. One of the earliest accidents in the present century occurred when the breach of a 12-inch gun was opened four minutes after the failure to fire. Just at this moment the charge ignited and the resulting explosion killed two officers and nine men. Later, on one occasion aboard ship during target practice, an 8-inch gun was mistakenly cocked for percussion firing when electric firing had been ordered. The attempt was made to open the breech and ease down the lock. While it is not clear just what happened, it is evident that the primer fired and ignited the charge, resulting in the death of the nine men in the turret. On another occasion a flareback ("back flames") on a 12-inch gun ignited bags of powder in the turret causing the death of a score of men and almost resulting in the blowing up of the ship. At another time a man slammed the breech plug of a gun and when this failed to force the cartridge case home, he violently tried again—the gun was fired and the plug which had not engaged the threads of the screw box was projected violently to the rear. The resulting disaster caused the death of four men. The final illustration has to do with a man who was peacefully sleeping on deck at noon near the barbette of a 12-inch gun—his head resting on a low mushroom ventilator. Not realizing the man was in a dangerous position, the turret captain, without warning, swung the heavy turret around, crushing the man's skull. These are only a few of the accidents which caused regulations to be changed in order to prevent their repetition.

16F2. Precautions adopted. Strict rules promptly followed each horrible accident and *Navy Regulations* reflected the changing needs of the service. Today when a hangfire is assumed under way, *Regulations* forbid opening the breech for 30 minutes (not obligatory in time of action); it is forbidden to unlock or open the breech plug of a gun while there is a live primer in the lock; comprehensive safety orders regarding flarebacks have been adopted; safety devices and fittings have been installed aboard ship. It is forbidden to use a force greater than that which could be applied by the hand in loading a cartridge case into a gun. Gas-expelling devices and sprinkler systems are in operation. At the same time it is constantly urged that safety cannot be sacrificed for speed. Today a gun captain is not permitted to train his turret (except at general quarters) unless elaborate precautions are taken to prevent any bluejacket's being injured outside the turret.

It is obvious that no regulations are more important both for the safety of the individuals and the ship than those dealing with explosives. The responsibility of officers, of course, goes further than mere obedience on their own part. They must carefully educate their men in these safety precautions and see that they are obeyed.

Great indeed is the responsibility of the gunnery officer and this is made clear, in part, in article 967 which states:

Safety orders. The gunnery officer shall be responsible for the instruction of the officers and crew in the safety orders, and all regulations regarding the care, stowage, handling and examination of explosives as laid down in the Navy Regulations and in the Ordnance Manual. (N.R. art. 967.)

The stern necessity for implicit obedience to the safety precautions is impressed upon the reader in the first part of article 972 which follows:

General. As familiarity with any work, no matter how dangerous, is apt to lead to carelessness, all persons who may supervise or perform work in connection with the inspection, care, preparation, or handling of ammunition or explosives—

- (1) Shall exercise the utmost care that all regulations and instructions are rigidly observed.
- (2) Shall carefully supervise those under them and frequently warn them of the necessity of using the utmost precaution in the performance of their work.

No relaxation of vigilance shall ever be permitted.

In each part of the ship where ammunition is stored or handled or where gunnery appliances are operated, such safety orders as apply shall be posted in conspicuous places easy of access, and the personnel concerned shall be frequently and thoroughly instructed and drilled in them.

Conditions not covered by these safety orders may arise which, in the opinion of the commanding officer, may render firing unsafe. Nothing in these safety orders shall be construed as authorizing fire under such conditions. (N.R. art. 972 (1)(2)(3).)

That the Navy Department is ever alert to the advantage of making safety precautions before accidents actually occur as well as clarifying present regulations is evident in paragraph 7 (art. 972) which reads:

Helpful suggestions and constructive criticism of these orders are invited. They should be made to the Bureau of Ordnance through official channels.

The precautions taken to acquaint not only those on board, but other ships in the vicinity that powder or other explosives are being transported, embarked or disembarked are found in article 1349 which follows:

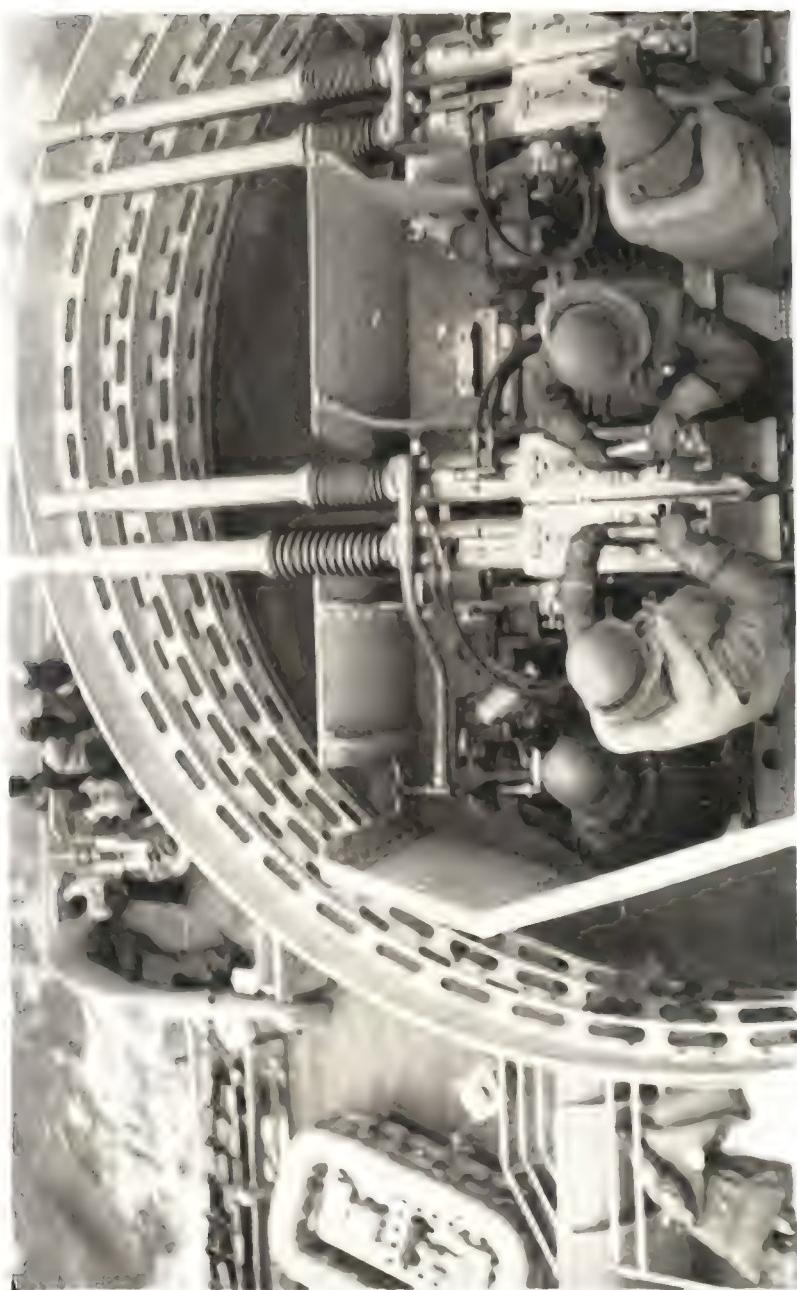


Figure 99 Men at guns like these realize the value of the safety precautions set forth in Navy Regulations.

Powder flag. A red flag shall be hoisted at the fore whenever powder or other explosives are to be embarked or disembarked. A red flag shall be hoisted in the bow of all boats, lighters, and other craft transporting explosives.

G. NAVY REGULATIONS AND DISCIPLINE

16G1. Extent and limitations of authority. Since our main interest is the line officer it would be well to note the extent and limitations of his authority in exercising military command as well as the manner in which he may exercise it. This vital subject of personnel relationship is dealt with in the "Articles," but in much greater detail in *Navy Regulations* proper.

The loyal, obedient, and understanding officer will have no difficulty in carrying out his obligations to his seniors, for the keynote of Navy discipline is expressed in the following article:

Duty of subordinates. All persons in the Navy are required to obey readily and strictly, and to execute promptly, the lawful orders of their superiors. (N.R. art. 90.)

It must not be forgotten that there are obligations to juniors as well as to seniors. The manner of exercising authority, which is as specific as the regulation which requires that this authority be respected, is carefully described in the following article:

Exercise of authority. Superiors of every grade are forbidden to injure those under their command by tyrannical or capricious conduct, or by abusive language. Authority over subordinates is to be exercised with firmness, but with justice and kindness. (N.R. art. 97.)

Should any person in the Navy consider himself oppressed by his superior or observe in him any misconduct, he is required to represent such oppression or misconduct to the proper authority as outlined in the following article:

Oppression by or misconduct of superior. If any person in the Navy considers himself oppressed by his superior, or observes in him any misconduct, he shall not fail in his respectful bearing toward him, but shall represent such oppression or misconduct to the proper authority. He will be held accountable if his representations are found to be vexatious, frivolous, or false. (N.R. art. 98.)

Individuals are safeguarded from the caprice or injustice of superiors. The manner of seeking redress of wrongs is found in the following article:

Application for redress. Any application for redress of wrong shall be made in writing through the immediate commanding officer to the commander in chief of the fleet or squadron, or to the senior officer present, and it shall be the duty of the latter to take such action in the matter as, in his judgment, justice and the good of the service demand. (N.R. art. 99.)

16G2. Conclusion. In conclusion, it should be remembered, that a high degree of discipline is indispensable in a military organization. Knowing the rules and strictly adhering to them is absolutely essential in the winning of this, the grimdest war in history. As "Stonewall" Jackson said: "Men and officers must obey, no matter what the cost to their feelings, for obedience to orders, instant and unhesitatingly is not only the life blood of armies, but the security of States. . . ."

The actions of an officer while wearing the naval uniform reflect not only on himself but also on the naval service and all its members. Furthermore, he is

responsible that all other Navy personnel junior to himself (in his presence) conduct themselves so as to reflect credit on the naval service. Failure to preserve good conduct among others may result in his being tried by a general court-martial and severely punished.

In common fairness to others in the service, the officer must at *all* times remember that he is "an officer and a gentleman," and act as such. The second element of the phrase "officer gentleman," applied originally as a semi-military term to distinguish the commissioned officer (who could purchase his rank) from the non-commissioned officer (recognized as the "officer soldier"). Since the late eighteenth century, it has lost its military and economic connotation and has taken on a cultural one. It has come to imply, as John Paul Jones put it, "a gentleman of liberal education, refined manner, punctilious courtesy and the nicest sense of personal honor." This connotation with all of the responsibilities that it implies, brings to mind such leaders as Nelson, Wellington, Decatur, Macdonough, and Lawrence. In concluding this chapter on Navy regulations and customs the words of two naval leaders on this subject may well be recalled. Speaking to a newly appointed midshipman, Admiral Nelson said: "As you from this day start the world as a man, I trust that your future conduct in life will prove you both an officer and a gentleman. Recollect, that you must be a seaman to be an officer; and also that you can't be a good officer without being a gentleman." The point was a cardinal one with John Paul Jones who emphasized it again when he said that "none other than a gentleman, as well as a seaman, both in theory and practice, is qualified to support the character of a commissioned officer in the Navy."

17

SECURITY OF NAVAL COMMUNICATIONS

"If one could always be acquainted beforehand with the enemy's designs, one would always beat him with an inferior force."

—*Frederick the Great.*

A. INTRODUCTION

17A1. General. Most nations for years have maintained espionage organizations of varying size and scope for the purpose of ferreting out information regarding current or potential enemies. The activities of these organizations have always been one of the greatest hazards to secret communications.

17A2. Organized espionage. When the totalitarian powers revolutionized warfare, among the things which they cast aside were the accepted theories of espionage. According to the new plan, originated by the Japanese and developed by the Nazis, espionage is no longer an undertaking by a relatively few isolated spies attempting to obtain military or naval secrets from high-ranking officers. It is a mass effort, carried out in all fields—military, naval, political, cultural—by thousands of unimportant persons in minor positions. They depend on statistical methods and the slow accumulation of bits of information until the aggregate tells a story. A single hint dropped unconsciously may prove to be an important piece in the jigsaw puzzle the enemy is putting together.

These informers are in large part sympathetic with enemy aims; in some cases they have been coerced into service through threats to relatives in the homeland or in occupied countries. Their purpose is to obtain and report as much valuable information as possible and to assist the enemy by spreading false reports, committing sabotage, directing invading forces, crippling key industries and utilities, seizing communication centers and generally cracking defense and undermining morale. The threat to secret communications which they represent is apparent.

As the only sure countermeasure against mass espionage, absolute national secrecy has been practiced by the Russians and the Nazis for years. Prior to the German invasion, the Russians successfully prevented the leakage of accurate information regarding their strength and preparedness; as a result, their ability to withstand aggression was wholly underestimated by the Nazis.

For years preceding the outbreak of the war no accurate news regarding progress of German rearmament was permitted to leak out of the country. The silence imposed was not limited to the Army and Navy but was extended to all factories working for national defense, with harsh penalties for those who violated secrecy. In those countries where invasion was almost immediately successful, a large part of the invaders' success must be attributed to the wealth of

information available to them in advance, as well as to the failure of the victims to take preventive action against the new type of espionage.

The lesson is clear. In order to combat the efforts of the enemy to gain intelligence of value, all who possess either official or unofficial information must practice absolute secrecy at all times.

17A3. The Navy as a source of information. Obviously, the Navy is a potential source of valuable information, and unceasing attempts to exploit that source may be expected. Methods open to the enemy are many—planting agents within the naval organization, photographing or stealing classified documents, tapping telephone and telegraph lines, attacking codes and ciphers, analyzing Navy radio traffic, and questioning or overhearing naval personnel when off duty. Although bits of information obtained through these means often appear innocuous, they prove to be of real value when subject to expert analysis along with other fragments of information from various sources. The necessity for unceasing vigilance and maximum preventive measures on the part of all naval personnel is apparent.

17A4. Importance of information in war. Modern warfare requires a tremendous amount of information. It is stowed away in books, it accumulates in reports, it is gathered by intelligence activities, it is transferred in letters and messages, and it is sifted and organized in the minds of men who are directing the war.

The aim of warfare is to concentrate a superior force at the right place and at the right time. Before this can be done, however, the information necessary to organize and assemble a superior force, to pick the right place, and to select the right time must be concentrated in a few minds. There are few examples in the history of victorious engagements where the victor did not obtain in advance the necessary information on which to base his decision. Conversely, disastrous defeats often can be attributed directly to lack of enemy information or the incorrect interpretation of it. After decisions are made, plans and orders must be communicated to all who will need them in the performance of their duties.

The goal of warfare cannot be achieved most effectively without the element of surprise. Therefore, information must be protected, every hint of the plans kept secret, and each decision concealed from all except those who need to know. Even information obtained in a public library becomes meaningful if the enemy discovers what information the Army or Navy is gathering. An account of tides and weather in the Kurile Islands might thus provide a valuable hint of impending operations even though it had nothing whatever to do with actual combat.

B. SAFEGUARDING CLASSIFIED INFORMATION

17B1. Methods. There are, in general, four ways in which classified information is protected. They may be enumerated as follows:

Censorship. This places a barrier between classified information and unauthorized persons by preventing its disclosure in letters, conversations, and

personal contacts. It means the shutting off of information *at the source*, except in making official use of it, and depends to a large extent on the integrity and discretion of the individual. There are two kinds of censorship, personal and official, but only the former will be discussed at this time.

Physical security. This has to do with protecting documents, devices, and communication material so that they never fall into the hands of unauthorized persons or come within either optical or camera range of actual or possible enemies.

Transmission security. This is achieved by reducing to a minimum the information the enemy can obtain from study of our communications, *chiefly of our radio traffic*, even though he cannot break down our codes and ciphers. Visual transmissions are included, but the limited range of such methods makes the problem comparatively simple.

Cryptographic security. This is provided by codes and ciphers used in communications and is concerned with *proper construction* and *correct use* of codes and ciphers so that they cannot be "broken" by the enemy.

C. PERSONAL CENSORSHIP

"What I must keep from a foe I do not tell a friend."

—Confucius.

17C1. When secrets slip. No one knows how many battles have been lost, how many ships have been sunk, how many lives have been sacrificed because someone casually or in a moment of boasting betrayed a vital military or naval secret. Available evidence indicates that the figure would be astounding.

In January of 1916, an American businessman in Warsaw was invited to dine at the home of a German military official. The food was excellent, the wine flowed freely, and barriers of nationality were temporarily forgotten. As the conviviality increased, the officer's tongue became loosened, and before the American left he learned that the Germans had scheduled for late February a terrific offensive against Verdun, designed to crush France. The story was passed on to the Allies, who reinforced the hitherto weak defenses of Verdun by bringing up additional troops and artillery. The Germans struck on 21 February, but the French guns were ready, and what might have been a decisive blow at France turned into a bloody defeat for Germany—all because of a loose tongue.

A pilot in an English coastal town had for years been steering merchant vessels through the difficult port waters. He boasted to his cronies in the tavern one night of his feat in bringing into port that day the largest ship of his career—a 25,000-ton vessel. That night a squadron of Nazi bombers appeared overhead; docks were destroyed, the loaded ship was sunk, and many lives were lost.

17C2. Reticence is necessary. There is only one safe conversational policy for naval personnel to follow when on duty: Say nothing about classified matter or information to anyone who is not authorized to know. There is only one safe policy when off duty: Say nothing about the work to anyone, even when in the company of authorized personnel. There are few places where conversation

cannot be overheard. It must be remembered that it is human nature to pass on a secret accidentally acquired.

Official secrets should not be discussed even with members of one's own family or close friends in whom one has the greatest confidence. Although they would never knowingly reveal information given to them, they may, in ignorance of its importance or forgetting its source, inadvertently mention a detail in casual conversation.

To keep the silence one should, by skillful maneuvering of the conversation or by outright refusal to talk shop, decline to discuss official matters. In many cases it is desirable to plead ignorance of the subjects under discussion.

Enthusiasm toward one's work is clearly desirable, but not when it results in a discussion of naval affairs openly. In the first place, such public display of naval matters is in poor taste. Secondly, and of more importance, information may possibly be overheard by enemy agents or by individuals who will unconsciously pass valuable data to them.

Enemy agents are probably all too plentiful. Recently two were arrested in New York. They were respected businessmen living a quiet suburban life on Staten Island and both were prominent in civilian defense activities. They daily took the ferry to New York, passing ships anchored in the harbor. They dropped in occasionally at bars where seamen gathered. A few facts and hints casually picked up were enough to give them information concerning convoys leaving New York. They resorted to the hoary trick of using invisible ink to send information to agents in Lisbon, writing between the lines of apparently innocent personal letters. There are probably many more just like them, waiting patiently for small bits of information to come their way.

Personal censorship includes telephone conversations. A naval officer who, in the course of his duties, refers to a dispatch over the telephone by mentioning both the serial number and the gist of the message, endangers both the information and the cipher, if the message was encrypted. An encrypted copy of the dispatch is probably available to the enemy. Telephone wires can be and are tapped. Private lines are less secure than party lines because they are specifically labeled and are therefore easy to locate at junction points in the cables. Conversations may be heard at the switchboard and various other points along the circuit.

Official secrets should not be discussed over the telephone, and no information of any nature should be given by phone to a caller whose identity has not been satisfactorily proved. If the caller professes to be an authorized person, but is not positively identified, it is often wise to break off the conversation and call him back on his officially listed extension, prior to discussing professional matters.

17C3. Diaries and letters help the enemy. A young soldier stationed near Sourayville during the First World War described in a letter to his mother the success of his battalion and the failure of the enemy to locate its position. "The enemy seemed to think we were in a similar clump of woods about 400 yards

north of us, for he shelled it heavily several times today," he wrote. The young man put the letter in his pocket for mailing at the first opportunity. That night he was captured. Less than an hour later there came a heavy concentration of enemy fire on the clump of woods in which his battalion was located. Over 100 of his fellow soldiers were killed and more than that number wounded.

It is a temptation to jot down in personal notebooks events that occur or interesting bits of information which will make entertaining conversational material after the war. This is dangerous. Diaries of prisoners are fruitful sources of information for the enemy.

D. PHYSICAL SECURITY

17D1. Why documents are closely guarded. Only a limited number of Navy personnel are authorized to handle and to use highly classified matter or to have knowledge of codes, ciphers, and confidential or secret communication equipment. The loyalty of other personnel in the great majority of cases is unquestioned, but, if they had knowledge of classified information, the likelihood of such information being given inadvertently to outsiders would be increased.

Anyone who removes secret or confidential material from the designated working space runs the risk of compromising the particular material concerned. During the German occupation of Paris in 1940, the Nazis reaped a harvest of valuable documents, duplicates and originals, which French politicians and government officials were retaining in their homes for current work or for writing their memoirs. Although they believed that such stowage was secure, fifth columnists had spotted the homes of officials, and lightning raids prevented destruction of the documents.

17D2. How code books are compromised. The famous Zimmermann message of 1917, in which Germany offered Mexico several American states as her reward for a declaration of war against the United States, was decoded by the British with no difficulty, for they had obtained a copy of the German diplomatic code from a young Austrian radio technician employed in the German Embassy at Brussels. The Austrian over a period of months had laboriously copied a few words a day from the code book, seizing moments when the book was unguarded, and hiding the slips about his person until he could pass them on to a British agent. Vaults, safes, or lockers used for stowage of classified material should always be kept locked when not under supervision of authorized personnel.

Capture of a code or cipher is always an extremely serious matter. Not only is the key available for deciphering current and past dispatches, but the basic style and structure of the system are apparent, giving substantial aid to cryptanalysts in the breaking of similar systems.

In the early days of World War I, an event occurred which had a tremendous influence on subsequent naval operations. When the German light cruiser *Magdeburg* ran aground in the Baltic Sea and was captured by the Russians, a

diver was sent down and soon retrieved a pile of submerged documents from the shallow water near the ship. This recovery was of double significance for the Allies, since the books contained the current German naval code and the keys for future variations; although the Germans frequently changed the key, they continued the use of the system for two years, enabling the Allies to keep in close touch with all their naval plans.

There have been several instances in the present war of the seizure of the codes from captured merchant ships before the ship's officers could dispose of them. Divers have retrieved important documents from enemy submarines sunk in coastal waters. In one case an unconfirmed report was received that eight enemy submarines were sunk at a rendezvous arranged through use of a secret code taken from a crippled submarine.

17D3. Necessity of safeguarding work sheets. Although great care is taken in the handling and stowage of classified matter, we often forget that the materials and methods used in preparing classified messages or other matter are potentially just as informative as the actual messages. Rough drafts and notes should be written on single sheets placed upon hard surfaces to avoid impressions, for chemical treatment and photography can make impressions remarkably clear. Stencils, cushion sheets, and carbon paper are almost as legible as the original, and desk blotters and backing sheets can be rendered clear. For these reasons the same care and stowage should be given materials and supplies that is given the classified matter itself.

17D4. Report of suspected compromise required. Whenever evidence is received indicating that a code or cipher may have been broken or captured by the enemy, use of the system is discontinued and outstanding publications are destroyed, for continued use of a compromised cipher may result in defeat. Therefore, whenever anyone uncovers evidence that unauthorized personnel have had access to classified matter or that a cipher may have been compromised, it is his duty to report the details promptly. If a ship goes down, it is essential that the Navy Department receive full details immediately of the disposal of classified matter, particularly what became of the secret and confidential publications which were aboard.

E. TRANSMISSION SECURITY

17E1. Methods. Information is of little use unless it can be transmitted from one point to another, and, when necessary, transmitted *rapidly*. The five principal methods are messenger, mail, wire, visual, and radio. Choice of methods depends upon the security that is necessary and the speed desired. All five methods are sufficiently reliable, but messenger and mail are slightly more reliable than are wire, visual, or radio communication.

The safest means of transmission of classified information is by a thoroughly trustworthy messenger, usually an officer messenger. Officer messenger is required for most secret documents. Nearly as safe is transmission by registered mail through the United States postal system. In some instances this method is

authorized for secret documents and may be used for the majority of confidential documents.

Regular mail or airmail is a very safe and rapid method of communication; first, it results in the actual physical transfer of the message or material from originator to the addressee, with no chance for errors in transmission; second, when properly wrapped, the information contained is not subject to accidental scrutiny by anyone other than the originator and the addressee. Mail passing through foreign postal systems is less safe, of course.

Messages should be sent by mail whenever possible; but there are times when this method of communication is not fast enough. In such cases transmission by wire (on land) or visual (at sea) is preferable. If land-line, cable, or visual means cannot be used, the hazards of radio transmission must be accepted.

Visual methods consist of semaphore, blinker, flag hoist, and signal lights. Blinker transmission is the most important as far as security is concerned. Visual methods are used *extensively at sea* and are preferable to radio for security reasons in most cases. All are quite safe as long as they operate beyond optical range of enemy airplanes, submarines, and shore lines.

Wire methods of communication are not entirely safe. Both landlines and cables can be tapped, even submarine cables. This method of transmission is extremely safe in the majority of instances, however, especially when the landline or cable is *completely* under United States or Allied military control. Even then, messages are usually "wrapped up" in code or cipher before transmission.

It is radio which gives the most trouble as far as transmission security is concerned and in ways that need to be explained somewhat at length. Anyone who has a receiving set may intercept our radiotelegraph traffic. It must be assumed that the enemy copies nearly everything we send by this means and also a large part of our transmission by voice radio.

17E2. Precautions necessary in handling radio traffic. All classified messages sent by radiotelegraph are "wrapped up" in a code or cipher and sometimes *both*, in order to protect their contents from the enemy. Use of codes and ciphers is not enough, however. Even if the enemy is not able to break a single one of our codes or ciphers, he can still learn enough to make it almost unnecessary to try to break them, unless we take extensive measures to hinder him.

If a ship at sea uses radio for more than a few seconds at a time, enemy direction finders can locate the ship with considerable accuracy. If all of the ships in a task force were to use their radio transmitters at will, the enemy could easily tell how many ships there were, where they were going, and how fast. Radio has gone a long way toward making communications a goldfish bowl.

There is only one way of solving this particular problem, and that is for ships to maintain a strict radio silence most of the time except when in combat or when certain that their position is known to the enemy. Dozens and even hundreds of messages may be transmitted from shore, but ships must not use their radios even long enough to receipt for messages, and radiating receivers are forbidden at sea on merchant ships and warships alike.



Figure 100. Aboard the mighty U.S.S. North Carolina, signalmen hoist and stow signal flags in the "Flag Bag." One of the ship's giant searchlights is also shown.

Most of the Navy's wire and radio traffic moves from one point to another ashore and is handled by shore stations. A rather small number of powerful radio stations collect the messages intended for ships at sea and these are broadcast on what are known as "Fox" schedules. Operators afloat copy these schedules, decrypt the messages addressed to their respective ships, and thus receive orders, instructions, intelligence, news, and the occasional personal messages which may be necessary. The shore stations are arranged in what are known as circuits. As a ship moves from one area to another, its traffic follows it by wire or radio along the coast and is put on the nearest Fox broadcast, so-called from the procedure sign "F," meaning "Do not answer."

17E3. Hazards of radio transmission. Unless ingenious precautions are taken, the enemy can still find out a great deal about fleet movements. He can trace a message as it is relayed from station to station along the shore and finally put on a Fox broadcast. By guessing the call signs of the ships at sea, even when these are encrypted, he can watch the traffic for those ships *shift* from one Fox

broadcast to the next as the ships move from one area to another. When a large task force forms for an operation he can tell from the unusual amount of radio traffic coming into that area and broadcast from nearby radio stations that something important is going on. Often he can guess what it is or he can send submarines and airplanes to identify and keep track of it while preparations are made to meet the expected attack.

There are many other ways in which the enemy can gain valuable information by listening in on our radio transmissions even though he can read none of the classified messages. If an operator anywhere has peculiar traits in sending or fails to use standard radiotelegraph procedure, he can recognize that operator whenever he opens up and trace him wherever he goes. If an operator with a false sense of security becomes careless and indulges in authorized Morse code or voice conversations with another operator, the enemy can usually pick up valuable clues. The remarks may seem perfectly harmless to the operator.

If someone makes a mistake in using a cipher or code and an addressee has to check back to the originator to find out why he can't decrypt the message, an additional opportunity is provided for the enemy to gain a hint of what is going on. If an operator ever sends a message in plain language that should have been "wrapped up" in a cipher, the enemy is apt to hear it and make the most of the information.

Even tuning and testing help the enemy. If PT boats tune their radios just before starting out on patrol, they might as well send a message direct to the enemy announcing their departure; the same applies to planes which are about to take off. Yet PT boats and planes *must* test their radios somehow and be sure they are in good working condition while out on patrol.

All of these problems and many more come under the heading of transmission security. You will learn later on how some of them are solved—and helping to solve them may someday become one of your duties. It is not enough for operators to know procedure perfectly, follow to the letter the rules of circuit discipline, and operate their radio sets or transmitting keys in a standard way. Their officers must think up ways of keeping the enemy in the dark as to the size of the force, its destination, its makeup, and its identity. This is one of the most challenging jobs in naval communications.

17E4. Voice radio creates security problems. Most ships now have radio-telephone apparatus or voice radio. This creates additional problems for transmission security. A person is tempted to be careless when using plain language and to say too much. The reliable range of voice radio is only about 40 miles, but voice radio messages have been heard 600, 700, 800, and even 900 miles away owing to a curious characteristic of radio communication known as the "skip zone" phenomenon.

A good voice code is almost impossible to construct, and plain language has to be used to a considerable extent. Both radio operators and radio talkers must have ways of identifying each other or authenticating in order to prevent the enemy from successfully pretending to be a member of our fighting forces.

Enemy attempts at deception have been numerous and sometimes ingenious. While these have not been successful in the past, it is natural to expect that the enemy's skill will increase, and communicators must be ever alert to recognize and disregard enemy attempts to give false orders, conflicting orders, and false information in good English.

17E5. Considerations of visual security. Visual communications have their problems of security also, though these are much less complicated because visual messages are limited in range. At night it is better to use voice radio than blinker signals, particularly if a ship is in or near enemy waters. A blinker transmission aimed ashore either in the daytime or at night is likely to give some unauthorized person, or an enemy agent, valuable information unless the blinker message is encrypted. However, even an encrypted blinker message at night may be dangerous because it gives a point of aim to an enemy plane, ship, submarine, or shore gun within range.

17E6. Summary. To summarize, then, the five principal methods of transmission are, *in the usual order of their security*:

1. Messenger (officer)
2. Mail
3. Wire
4. Visual
5. Radio

This is elaborated in *Communication Instructions, U. S. Navy, 1944* as follows:

1. Messenger
2. Registered mail—guard mail, U. S. postal system, or diplomatic pouch
3. Landline or cable—Army or Navy controlled
4. Ordinary guard mail or U. S. postal system
5. Domestic landline or cable
6. Short-range systems—visual, underwater sound, ultra-high frequency radio
7. Foreign landline or cable
8. Low-power radio
9. High-power radio

All transmissions are likely to be intercepted and studied. The relative security of one method over another will vary according to circumstances.

F. CRYPTOGRAPHIC SECURITY

17F1. Definitions. A *cipher* is a system of substitution or transposition by which the *individual letters* of plain language text, usually dealt with singly, are converted into a form intelligible only to those who possess the key or can reconstruct it. A *code*, on the other hand, is a method of representing words, phrases, individual letters, or other fragments of plain language by means of *groups* of numbers, letters, or numbers and letters, according to a table of meanings which had been previously adopted.

Protection of codes and ciphers against enemy attempts to "break" them is the

object of cryptographic security. Cryptanalysis is the science of "breaking" codes and ciphers and of reconstructing the keys or the code books. The term is a synonym for cryptographic analysis.

Before the war a little-known science, cryptanalysis has since been popularized by several recent books on its history and methods. It has some remarkable achievements to its credit. It may be of interest to know something about the background of this strange science.

17F2. Ciphers and codes in warfare. Use of transposition ciphers has been traced back 2300 years to Sparta, and Julius Caesar is credited with the invention of the substitution cipher. Progress was slow, but the history of all major countries, especially since the Middle Ages, shows that secret communication has played a part in most intrigues and wars. A number of cipher messages plotting the assassination of Queen Elizabeth and purported to have been written by Mary, Queen of Scots, and her confederates, figured during Mary's trial.

During his Russian campaign, Napoleon communicated with his marshals by means of a simple cipher in which numbers were substituted for letters, names, and commonly used words. The Russians without difficulty deciphered the intercepted messages and followed Napoleon's plans.

The War Between the States and the Franco-Prussian War brought the age of mass armies and, since no general could keep all of his forces under personal observation, rapid, secret communication was required to a greater extent than ever before. Ciphers and codes therefore were transformed from military tools of occasional use to routine necessities.

The Boer War indicated that codes, although satisfactory for higher units of command, were too limited in their means of expression for minor military units. As a makeshift, the British discovered that Latin, an almost unknown language to the Boers, proved a successful means of secret communication. In the present war American Indians have, in some instances, been used as telephone talkers.

Arrival of wireless early in the present century emphasized the necessity of disguising all classified messages sent by radio, for enemy as well as friend could now receive them. There ensued a period of intensive study. Thefts of military, naval, and diplomatic codes and ciphers were prevalent. Scandal and treason were uncovered on all sides as nations purchased or stole each other's code books and cipher keys.

17F3. Radio and secret communication. During World War I, radio began to assume increasing importance. For the first time in history, all Army units could be in prompt and immediate communication with headquarters, and each ship with the commander in chief. But errors and failures were prevalent; scarcely an encounter took place without some breakdown in the communication system. Gradually, however, as training and experience of personnel grew, use of the newly invented methods of communication improved.

All nations meanwhile became impressed with the importance of communication security. They established cryptographic bureaus where, in the greatest of

secrecy, code and cipher systems were developed and enemy systems were broken down. Serious violation of security principles was common and often victory or defeat was ordained in the code room.

As radio was perfected, methods of secret communication increased in complexity and security. Although there is little direct resemblance between modern systems and the early ones, most current systems fall into the basic categories of long ago—substitution ciphers, transposition ciphers, and codes.

17F4. Ciphers and codes, relative advantages. A substitution cipher is so called because each letter of the "plain English" or "clear text" is replaced by some other letter or, occasionally, the same letter. A transposition cipher is a rearrangement or "scramble" of the letters which make up the clear text according to a route or pattern of some kind. Transposition ciphers are seldom used today, and various kinds of complex substitution prevail.

Codes are in general use, but their limitations of expression, the time required for coding and decoding, and their lack of security often make them satisfactory only for conveying information of a specialized nature, such as weather and contact reports. One of the most secure methods of secret communication results from the substitution of code words for the plain language text, followed by encipherment of the coded version.

17F5. Cryptanalysis and its methods. Today cryptanalysis is firmly established as a science of considerable value to nations at war. Many of those employed at this work have spent their lives in attacking what to the layman appear to be insoluble ciphers or codes. Although systems of communication are more secure now than ever before, the cryptanalyst's ability to break messages has increased considerably. During the present war, for example, a message was transmitted in cipher from one British post to another. It was intercepted by the Nazi army, deciphered, translated into German, enciphered in a German system and transmitted to Berlin. This transmission was intercepted by a British station, deciphered, translated into English, enciphered and sent back to the point of origin. The entire process is said to have required only a few hours.

The cryptanalyst's methods of attack may be grouped in two general categories, (1) the mathematical and (2) the intuitive, but in actual practice a combination of the two methods is used.

Mathematical solutions are based on the fact that languages have certain characteristics which are fairly consistent in a large amount of text. These "mechanics" of languages have been thoroughly studied and tabulated. Available to the cryptanalyst, therefore, are tables showing the frequency of occurrence of all letters for a certain quantity of text. The letter E in English, for instance, appears 126 times for each 1,000 letters of military telegraphic text, U appears 30 times and Z rather rarely.

There are similar tables on the occurrence of letters as initials and terminals of words, on common doubled letters, and on digraphs. A mass of related information has been accumulated; the cryptanalyst knows, for instance, that

the average length of an English word is 4½ letters, that 50 percent of English words end in D, E, S, or T, that about half of the words begin with A, O, S, T, or W, and that the letter U always follows the letter Q.

In pursuing the *intuitive attack*, the cryptanalyst makes assumptions as to the gist of a message or the plain language meaning of a particular portion and attempts to prove the accuracy of his assumption through application of his conclusions to other parts of the message. He uses as aids his knowledge of the habits of the enemy, variations in volume of traffic, assumptions as to the originators and addressees drawn from message headings and, above all, habits in choice of terminology and errors in encryption. He sometimes needs only one or two apparently minor leads as to the thought of a message to identify words and reconstruct the message. Weighing this information in the light of other knowledge available to him, he may succeed in his attack.

Once the cryptanalyst has broken several messages encrypted in the same system, he has usually accumulated enough data to reconstruct at least a portion of the system, permitting more rapid decryption of future messages sent by the same means. Eventually, the cryptanalyst can read messages in that system as promptly as the authorized holders.

17F6. Defenses against cryptanalysis. A detailed explanation of all the defenses possible against cryptanalysis will not be attempted here. However, a few general hints will prove valuable.

First of all, while it is theoretically impossible to construct codes and ciphers which are unbreakable, nevertheless almost any cipher will withstand attack for a certain period of time if properly used. The elements of the system in use should be changed from time to time, for it can be assumed that the enemy's progress in breaking the system will increase with the passage of time.

Messages should be drafted in accordance with the rules set forth in Chapter 2 of *Communication Instructions*. The current instructions for the code or cipher in use should also be followed carefully for they are based on scientific knowledge of the methods of constructing codes and ciphers and on practical experience in breaking them. The rules vary with the system used and are, in addition, changed from time to time as weaknesses are discovered, or habits of use are noticed.

For more detailed information on this subject, Chapter 4 of *Communication Instructions* should be consulted.

18

NAVY CORRESPONDENCE—PART I

A. OFFICIAL LETTERS

18A1. Preparation of official letters. The first step in the preparation of an official letter consists of assembling and recording all data pertinent to the subject. If a letter requires particularly careful preparation, it is advisable, as a preliminary plan, to make notes of the main facts, the relevant minor facts, the supporting circumstances (if necessary), and the specifications recommended, requested or accomplished. This procedure will minimize the omission of pertinent facts and aid in the composition of a rough draft.

The next step is to arrange the notes in logical sequence according to a definite system for the presentation of subject matter. It is particularly essential that letters written by members of military establishments follow the conventional form since the major part of official correspondence comprises reports, requests, and recommendations. Such correspondence lends itself to formal statement, and letters in these categories must be definite. Words which are unnecessary, unusual, and those with ambiguous connotations should be avoided.

The first objective is the attainment of *clarity*. Therefore the ideas which a letter is intended to convey must be in no danger of misinterpretation. Failing to give an exact presentation of facts, omitting supporting details, or neglecting to arrange material so as to lead to definite conclusions—these things are not to be tolerated in official correspondence. On the other hand, properly written letters, leading logically to definite conclusions by the use of a minimum of words and orderly presentation of facts, compel favorable attention.

18A2. Principle of form. *Navy Regulations* prescribes a form to be used for official letters within the naval service, and one to be used in corresponding with civilians or other government agencies that do not use the same form or one similar to that prescribed for use within the Navy. In April 1943, the Secretary of the Navy issued a directive with instructions to the shore establishments of the Navy for the modification of the forms in use.

These changes were made to free the Navy Department and the shore establishments from unnecessary work, and to alleviate the increasing shortage of clerical personnel. The directive was *not* applicable to naval forces afloat. In brief, it means that the forces afloat use the older form for official letters, while a modified form is used by the shore establishments. Due to uncertainty of

future assignments, it would be advisable for an officer candidate to familiarize himself with both forms.

Reference to the sample letters at the end of this chapter will indicate that both the regular and modified forms follow the same general plan as outlined below:

1. File number
2. Security classification (if applicable)
3. Heading
4. Date
5. Originator (varies in modified form)
6. Addressee
7. Official channel addressees (if applicable)
8. Subject
9. References (if applicable)
10. Enclosures (if applicable—varies in modified form)
11. Body of letter
12. Signature
13. Distribution of copies

Variations in the prescribed forms are required for form letters, circular letters, multiple-address letters, and joint letters emanating from the bureaus and offices of the Navy Department, district commandants, and fleet and fleet unit commanders. Memoranda used for inter-office matters, locally within the same command, do not require the same degree of formality. Many official letters are written as reports, but most routine reports are prepared by use of printed blank forms. Blank forms are provided by the bureaus and offices of the Navy Department and by local unit commanders for nearly all of the routine records and reports required in the Navy. Printed forms do not necessarily follow the forms prescribed for typewritten letters.

There is no single form of official letter which fits perfectly all classes of correspondence. However, there are principles of form which, if followed, will reduce the length of letters and lead to the desired sequence of expression. No correspondence form can be used as a substitute for thought and knowledge of subject matter on the part of the writer.

It must be remembered that the official letter is wholly impersonal. The personality of the writer is not to be reflected in the official communication as in personal and familiar correspondence. Navy correspondence is generally confined to the third person. An exception to this general principle is illustrated in the letter reporting the sinking of the *Panay* (described in Chapter 20), which uses "I report" instead of the usual Navy formula "It is reported. . . ."

18A3. Navy phraseology. Whereas use of the third person is the main grammatical convention for sustaining the official mood, certain conventions in phraseology have also been adopted. Usage through the years has made them so generally accepted that many officers use them blindly as a matter of form or custom without realizing that the conventions have been formulated to meet

specific situations. They, therefore, fail to apply them properly or to use them with the discrimination which gives them meaning. While it is true that Navy phraseology is stereotyped, it is equally true that the forms into which it is molded have been found most adaptable to the needs of the service.

The conventional phrases and terms which have been adopted and have continued in use are those which have been found to express adequately, accurately, and conveniently, constantly recurring conditions, circumstances, situations, and events in the Navy which necessarily make up a greater proportion of its correspondence. In expression, uniformity as well as format is a means of insuring speed of handling and accuracy.

Accuracy, however, presupposes a discriminating use. For example, note the gradations of authority and meaning the following conventional phrases convey:

1. It is ordered . . .
2. It is directed . . .
3. It is recommended . . .
4. It is suggested . . .
5. It is believed . . .
6. It is requested . . .
7. It is reported . . .

(Subjects like information, permission, etc., may, of course, be substituted for *it* in many cases.)

The first two phrases obviously carry the greatest authority and are, therefore, used only by superiors in addressing their subordinates in the chain of command. The second, as the word *direct* implies, relates more specifically to the manner in which an order is to be executed or to the issuing of directions in certain procedures.

A superior may also recommend, whereas in the same situation, a subordinate would request that thus and so be considered. If by virtue of his technical knowledge he was in a position to recommend procedures, this would, of course, be expected of him and he too would use "It is recommended."

Equals, in arriving at decisions involving concerted action or cooperation would use "It is suggested" and "It is believed." These expressions would be equally suitable for use by subordinates to superiors where information or suggestions had been specifically requested by the superiors.

"It is reported" is the accepted formula for a number of situations, such as the requirement that Commanding Officers of ships report uncharted dangers to navigation discovered on their cruises. In fact, it is the logical and natural beginning for a number of Navy letters whose subject is ". . . ; report on.", the blank covering anything from navigational dangers to the good or bad conduct of an individual or a mechanism.

18A4. General rules for all correspondence. The following general instructions are prescribed in *Navy Regulations* for official correspondence in the navy service.

1. All correspondence shall be typewritten if practicable, but should a type-

writer be unavailable the communication must be legibly written without erasures or interlineations. (Minor ink corrections to save retyping of letters and reports are authorized and encouraged in the SecNav directive of 27 Apr. 1943.)

2. Address letters to those who, by regulation or law, have cognizance of the subject presented, or are authorized to take action thereon. All communications intended for officers holding positions with recognized titles should be addressed to them by title and not by name, as "Secretary of the Navy," "Chief of Naval Personnel," "Commandant, Third Naval District."

3. Forward all correspondence through the prescribed official channels.

4. Separate letters should be written on separate subjects unless the subjects are of like nature.

5. As a rule, a letter should be answered by a separate letter and not by endorsement.

6. Minimize correspondence as much as is compatible with the public interests, both as regards the number of letters written and their length. Form letters, pattern letters (typed form letter), stock paragraphs, and endorsing stamps are encouraged for routine recurring messages to save composition and typing time.

7. Use accurate, simple, and concise statements in a courteous tone, confining each letter to the subject at hand without omitting any essential details, and arrange the paragraphs of a letter in logical sequence.

8. Tables, diagrams, and sketches are to be used, if practicable, when they add to clearness.

9. Official correspondence between subordinate officers of ships or naval stations is forbidden by regulations. All official correspondence originating within a command must be in the name of the Commanding Officer for his signature, or signed as he may direct or forwarded via his endorsement.

10. When official business is conducted by telephone or orally, the substance of any communication or order that must be made a matter of record should be reduced to writing without unnecessary delay.

11. All communications, orders, bills, requisitions, and papers which by law or regulation are required to be signed, approved, or forwarded by an officer in command, must be actually signed by that officer in his own handwriting, or, in his absence, by the officer next in command at the time. The name of the officer should be typewritten under his signature.

12. An officer signing for another in whose absence he is in command or in charge, should have the word "Acting" after his signature; in this case the title of the official from whom the communication emanates, as indicated after the word "From" at the beginning of the letter, should not be modified. Thus, in the absence of the Commandant, the words, "From: Commandant, Third Naval District" would still appear in the heading, and the acting Commandant would sign and his name would be typewritten, followed by "Acting." The term "Acting" is not used by an officer left in command of ships or divisions or other units afloat.

13. When an officer in charge of a section of an office has been authorized to sign mail of the section, "By direction" should be typewritten after his name under the signature. The title of the officer in command should appear in the prescribed place at the heading of the communication.

14. When an officer is writing on his own account, his rank is indicated after the word "From" in the heading of a letter. Therefore, only his signature is necessary in conclusion. This, however, should include the typewritten name, which should also appear on all copies.

15. The only time an officer's rank appears after his signature is in letters addressed to officials and civilians who have not adopted the official form of naval correspondence or as prescribed in the modified forms for correspondence in shore establishments. Letters to civilians are prepared in the regular business style, and, in order that the recipient of the letter may know the rank and office held by the sender, after the complimentary close of the letter, the writer's signature is typed, together with his rank, title, or position.

16. The sheets of the letter or report should be arranged in regular order from bottom to top; i.e., the first sheet on the bottom, the last sheet on top. Enclosures, if any, are to be attached in regular order on the bottom page of the letter, all securely fastened together. Additional sheets bearing endorsements, if applicable, should be attached, each on top of the preceding one, on the face of the correspondence, so that the last endorsement shall be uppermost. Whenever an endorsement begins on a new sheet the subject shall be repeated. Every page in a letter, including the endorsements, should be numbered at the middle of the page about one-half inch from the bottom. These numbers should run consecutively throughout the correspondence. When folding is necessary, letter paper should be folded in 3 and typewriter cap in 4 equal folds parallel to the writing.

18A5. Letter forms. Examples of the four principal types of letter forms used in the Navy appear in the following pages.

1. Official letter—forces afloat.

This is an example of an official letter in the form prescribed by *Navy Regulations*. At present it is used only by the forces afloat; the shore establishments use a modified form.

DD987/A5-7
Ser 123

U. S. S. DESTROYER (DD987)

RESTRICTED

Care Fleet Post Office,
San Francisco, California,
19 July 1943.

From: Commanding Officer.
To: Commander, SERVICE FORCE, PACIFIC FLEET.
Via. (1) Commander, Destroyer Division FORTY.
(2) Commander, DESTROYERS, PACIFIC FLEET.

Subject: Standardization Runs over Measured Mile—request for.

Reference: (a) ComDesPac ltr FF12-4/A5-7(3)/(08:tb) of 1 July 1943.

1. It is requested that standardization runs over a measured mile be scheduled for this vessel during the last week of the current month, such runs to be made in accordance with reference (a).

2. Completion of the current overhaul period alongside the tender is expected on 21 July. Scheduled operations would not conflict with any date set during that week.

T. V. HANCOCK.

Copy to:
CO USS TENDER

2. Official letter—shore establishments.

This is an example of an official letter in the modified form prescribed recently (1943) for use in the Navy shore establishments.

Refer to Initials
and No.
Op-13c-jc (hjm)
Serial 85812

NAVY DEPARTMENT
OFFICE OF THE SECRETARY
Washington, D. C.

27 Apr 1943

To: All Bureaus and Offices, Navy Department
All Shore Stations

Subj: Change in Correspondence and File Practices for the Shore Establishments.

1. In order to free the Navy Department and the shore establishments from unnecessary work and to alleviate the increasing shortage of clerical personnel, the correspondence and filing practices outlined in the enclosure are made effective immediately.
2. This directive applies to the Coast Guard and Marine Corps only insofar as they have been governed by practices and instructions of the Navy. This directive is not applicable to the Naval establishment afloat.
3. Articles in chapter 52 of Navy Regulations which conflict with this directive are hereby suspended.
4. The necessity for speeding the flow of essential communications is evident.

FRANK KNOX
Secretary of the Navy

Encl:

1. Correspondence procedure for shore establishments

Note:—2 lines "Refer to Initials," etc., are fine print on letterhead stationery.

3. Letter originated by an individual.

This is an example of a letter originated by an individual on official Navy business but involving the person rather than his official position. The first endorsement, made by the individual's Commanding Officer, is also shown. It should be noted that the first person "I" is correctly used when the official originator is an individual speaking for himself rather than for a title of office.

U. S. NAVAL STATION
New Orleans, Louisiana

4 Jan 1944

From: Lt. (jg) John H. Hancock, #123456, D V(S) USNR

To: BuPers

Via: (1) Commanding Officer

(2) ComEight

Subj: Change of Duty; request for.

Ref: (a) BuPers cir ltr No. 999-43 of 28 Dec 1943.

1. It is requested that I be assigned to sea duty in a combatant vessel, preferably a destroyer or destroyer escort.

2. My reason for submitting this request is that I have served ashore for over a year and feel that I could be of greater service to my country by changing to duty at sea. I have had the experience of two training cruises in destroyers as an enlisted man in the Naval Reserve.

3. I have completed the Naval Reserve correspondence courses in Navy Regulations, Communications, Navigation B-40, and Seamanship. I am 32 years of age.

JOHN H. HANCOCK

NS3/P16 3/00 123456

End-1

U. S. NAVAL STATION
New Orleans, Louisiana

4 Jan 1944

From: Commanding Officer

To: BuPers

Via: ComEight

1. Forwarded, approval recommended, provided an officer can be furnished as relief.

2. HANCOCK served as an assistant to the communication officer in this command. An Officer of the Women's Reserve with communication training would be acceptable as relief.

J. B. DOE

4. *Letter to civilian.*

This is an example of a letter written to a civilian or to an official of another Department of the Government not using the Navy Correspondence form.

U. S. S. QUINCY
Norfolk, Virginia

3 Oct 1944

Mr. H. I. Jay
Superintendent of Schools
Portsway, South Carolina

Dear Sir:

The Commander, Cruisers, ATLANTIC FLEET has, on your request, directed that the U. S. S. QUINCY provide five commissioned officers to speak in public schools of Portsway on Navy Day, October 27th.

Will you please let me know the names and locations of the schools at which these five officers should report, the hour when the addresses should be given, and the range in age of the pupils to be addressed at each school?

As commanding officer of this vessel I desire to cooperate with you to the fullest extent in the observance of Navy Day. On receipt of the information requested above I will designate an officer to speak at each school and will forward to you the names of officers so designated. If there is any further information you require, I shall be glad to give it if possible.

Yours truly,

A. B. SIGNATURE
Captain, USN
Commanding

19

NAVY CORRESPONDENCE—PART II

A. OFFICIAL REPORTS

19A1. General. As was pointed out in Chapter 19, a naval officer must have the ability to think clearly and to write coherently and concisely. Not only must he be able to analyze a problem or a situation accurately and determine the true relationship of the facts involved, but he must have the ability to convey precisely what he means through well-chosen words. This requisite is essential in all official correspondence and particularly so in the case of the official report.

The official report is one of the many types of official correspondence. Since it lends itself readily to a logical order of development, it provides a good basis for a review of official correspondence. For this reason, this chapter will be devoted to a detailed consideration of the official report.

Effective expository composition depends upon the presentation of ideas and incidents in logical sequence. Their orderly arrangement must be determined by the relationship of the facts in the case. Likewise, in organizing an official report, the writer must know the best structural pattern to follow and the underlying principles which should be used.

The official report is a formal explanation of a situation, problem, or event. Whether it is the account of a battle, the sinking of a ship, or the description of a new machine, a written, official letter is required under *Navy Regulations*. It should be accurate and as brief as possible in covering the essential facts. The manner of development naturally depends upon the subject.

Scientific tests on stations and routine ship engineering reports follow instructions laid down by their individual commanders.

19A2. Action report. Action reports at the present time follow the formula set forth in the directive of the CominCh, 29 October 1943 (*Navy Department Bulletin*, cumulative edition, 31 December 1943—No. 43-1531—War Diaries, Ship's Logs, Submarine Reports of War Patrols, and Action Reports) as follows:

(a) The action report if not covering a special action shall be submitted to the Commander in Chief, United States Fleet, via the chain of operational command, *furnishing an advance, clearly legible copy to the Commander in Chief, United States Fleet*, via air mail, if practicable, and if the classification of the report so permits.

(b) These action reports shall be classified *Confidential* unless the nature of the report clearly indicates that a higher classification is required. Avoid the use of code names. If code names are used, the document must be classified *Secret*. Classified dispatches quoted shall be well paraphrased and so marked, and, in general, the reference numbers omitted.

(c) In the interest of standardization and as a guide in preparation and aid in analysis of the above reports, the subject matter, as applicable, should be divided as follows:

Part I:

A general narrative of the action including composition of own forces, preliminary operations, mission, doctrine, tactical aspects, and enemy forces. Copies of operation plans or orders should be included as enclosures if needed for clarity.

Part II:

Chronological order of events, including, as appropriate, high frequency voice log, and, as an enclosure, diagram of the action.

Part III:

Remarks on performance of ordnance material and equipment, including ammunition expenditure.

Part IV:

Brief résumé of battle damage—own and enemy.

Part V:

Special comments, such as CIC, Navigation, Engineering, Damage Control, Communications, Conclusions, Recommendations, etc.

Part VI:

Personnel, performance, and casualties.

(d) The Executive Officer's Report shall be included as an enclosure.

19A3. Panay report. The following report of the *Panay* incident, written for use at the U. S. Naval Academy and based on newspaper accounts which appeared at the time, will serve as an example of an official letter reporting an event. Obviously it may no longer be used as an example of an action report but it is recommended as a model for reports on collisions, groundings, and so forth, for which no set form is prescribed by *Navy Regulations*. Navy Department directives, of course, prescribe the form for dating and addressing reports as well as for sending them through proper channels, but they make no mention of the form which the body of the subject reports should take, other than general insistence upon brief and logical exposition. The six-division outline listed below, in general use throughout the Navy, is considered most satisfactory:

1. The summary
2. Preliminary events leading up to the action
3. A detailed account of the action
4. The situation immediately following the action
5. Casualties, damages, and their consequences
6. Recommendations and commendations

These divisions are not mandatory for every kind of report. In the interests of crispness of style and economy of words, several paragraphs may include information on all of the points. For a report of an important incident, however, the account of the action (division three) might require many pages. On the other hand, in reporting a situation of minor consequence, certain divisions may be omitted entirely.

It is well to remember, before analyzing the body of an official report, that one other element is of cardinal importance, namely the *subject*. Navy usage prescribes, for the purpose of immediate intelligence as well as for systematic filing, that the subject of all correspondence be stated in brief form immediately following the title of the addressee or the channeling activity. This subject, sometimes the most difficult element of the report to phrase, must present in

briefest essence the core of the report. It is subsequently expanded in the opening paragraph and appropriately elaborated throughout the remainder of the report. Difficulty in phrasing the subject sometimes occurs because it forces the writer to select and evaluate only the essential and most important matter reported upon. *Navy Regulations* (article 2021 (2)) states that "separate letters shall be written on separate subjects unless the subjects are of like nature." Difficulty in phrasing the subject occurs chiefly when matters of "like nature" are reported upon. For the sake of unity, coherence, and emphasis (the foundations of good composition), it is always safest to report on one subject at a time.

The *Panay* incident offers little difficulty in this area of composition since it lends itself readily to succinct, unequivocal expression as may be seen from the following form:

From: Commanding Officer, U. S. S. PANAY.
To: Commander in Chief, Asiatic Fleet.
Via: Commander, Yangtze River Patrol.
Subject: U. S. S. PANAY, sinking of.

Shanghai, China,
18 December 1937.

The most effective structural pattern for the first paragraph is the direct form beginning with "I report that . . ." The first paragraph of the *Panay* report might read as follows:

1. I report that on 12 December, 1937, the U. S. S. PANAY, while anchored in the Yangtze River 28 miles above Nanking, was bombed and sunk by Japanese planes. Fourteen persons were seriously wounded, three of whom later died.

Following the subject, then, this first division of the report is the *summary*. On occasion it consists of a single sentence. In every case, it must contain the essence of the complete report and must be brief, concise, and lucid. The following points should be included: (1) time and place, (2) objects and persons involved, (3) cause, (4) result. The subject matter may demand variations in the above sequence, but the immediate facts, as analyzed above, must be included—in short, the first paragraph should be the "who, where, what, when and why" of the report. Admiral Sims in describing the function of this paragraph likened it to the first paragraph of a newspaper account of a murder, saying: "Read any report of a murder and you will find the whole story told in the first paragraph; the rest is merely an enlargement." Thus, the phrasing of the first paragraph becomes another special problem of major importance. The summary (first paragraph) of the *Panay* report will, therefore, bear careful analysis.

Since the subject and result have been suggested already in their briefest form under the title "Subject," the opening paragraph must elaborate to the extent of identifying the *time* and *place* of occurrence. The first sentence of this paragraph is particularly well stated since it uses the periodic form for expressing all pertinent information in a clear and readable manner. The

periodic form is effective since in it the verb is placed toward the end, and the attention is thus held until every item is read. Even the choice of the passive voice for the verb seems appropriate since it accurately describes in a sort of grammatical parallel the unwarranted act of the aggressor upon a neutral ship at anchor. The arrangement of the sentence elements is dictated by the previous mention of the ship, which makes appropriate the entrance of the time element (12 December 1937) first, and by the periodic form, which necessitates placing the elliptical adverbial clause "while anchored . . . etc." before the verb.

2. The U. S. S. PANAY, as a member of the Yangtze Patrol, had been operating at Nanking to afford security to American interests, especially the Embassy Staff. The shell fire of the combatants had necessitated a change of berth several times. On the morning of December 12, however, the increasing intensity of shell fire rendered it imperative to move the ship to a more secure anchorage. Taking in convoy the Socony-Vacuum Oil Company's tankers, the S. S. Meiping, the S. S. Meishia, and the S. S. Meian, and carrying the Embassy Staff, with four additional Americans and five foreigners, the PANAY got underway and moved 28 miles up the Yangtze from Nanking to a supposedly safe area. There the PANAY and the convoy anchored in a compact group at about 1100, December 12. At all times we notified the Japanese of our change of berths. The U. S. S. PANAY was most distinctive, with hull painted white and her upper works and stacks painted buff. Her American nationality was clearly indicated by her large ensign at the gaff and by two large American flags spread across the top of her upper-deck awnings. The weather was clear; there was little, if any, wind; and the visibility was high. No other ships were anywhere in our vicinity.

This is division 2 and in it the preliminary events leading up to the action are related. It depicts in detail the state of affairs and describes courses of action immediately prior to contact. It begins the story as if the summary (which contains the bare essentials) did not exist; it is the introduction to the account of the engagement. Although the narrative should be exhaustive in explaining conditions essential to a clear understanding of that which takes place later in the engagement, the writer must beware of making the "situational setting" too wordy or involved. Merely those points relevant to the event should be reported in this preliminary picture. The situational setting is followed by a detailed account of the deed itself, which comes under the third division.

3. (a) At about 1338 we observed three large Japanese twin-motored planes, in a V-formation, flying overhead at a considerable altitude and heading down the river. Suddenly, without any warning, the PANAY and the MEIPING were subjected by these planes to a bombing attack, in which one or two bombs struck on, or very close to, the bow of the PANAY, and another bomb struck on, or very close to, the MEIPING. Upon the fall of the first bomb, the defense stations were manned immediately. Opening fire with the .30-calibre machine-gun battery, the PANAY engaged the Japanese planes throughout the entire attack. The PANAY was considerably damaged. The radio equipment and the forward three-inch gun were disabled. The pilot-house and sick-bay were wrecked. The steaming fireroom was so badly damaged that all power was lost; and the hull injuries were so severe that the PANAY, after listing to starboard, began to settle down by the head.

(b) This initial attack was immediately followed by a second one, launched by an air-squadron of six single-engined planes. These planes, diving singly, in a seemingly concentrated attack upon the PANAY, dropped in all about twenty bombs, which inflicted great damage upon both ship and personnel. During these attacks, which lasted about twenty minutes, two of the attacking planes used machine-guns. One machine-gun attack was directed against a ship's boat, carrying ashore some wounded, who received additional injuries. The boat, too, was pierced by bullets.

(c) The PANAY was making water so fast, at about 1400, that sinking seemed imminent.

Having only two boats, I ordered the wounded immediately evacuated to the beach. As the main deck was awash when the evacuation was completed at 1500, I ordered the ship abandoned.

If the action is brief, it (division three) may be presented in one paragraph; if involved or very extensive, many paragraphs may be necessary. One of the greatest weaknesses of the average official report is the tendency to over-paragraph. Usually, the fault lies in the attempt to convert every sentence into a paragraph and make what should be a well-organized and well-knit report a disjointed series of statements. Common sense and unity of subject matter, must determine the content of a paragraph.

Note that division 3 of our *Panay* report is grouped for convenience into three paragraphs. The Navy is interested in the style of writing to the extent that expression be brief but complete and to the point. What one has to say is of first importance—and usually the simplest way is the most effective. Short, declarative sentences are desirable.

4. Some time after our abandonment of the PANAY, a Japanese boarding party, from an army detachment operating in the vicinity, went aboard. At 1654, shortly after this Japanese party had left the ship, the PANAY rolled over to the starboard and sank in from 7 to 10 fathoms of water in the approximate latitude of 30 degrees 44 minutes 30 seconds north, longitude 117 degrees 27 minutes east.

The fourth division describes the situation immediately following the action or the "situational conclusion." It states the existing conditions and the action taken at the termination of the attack. It is difficult perhaps to determine just where 3 leaves off and 4 begins. In reports of simple events, divisions 3, 4, and 5 might well be in one paragraph.

5. Many aboard the PANAY were injured by flying fragments and concussion. All suffered shock on the first bomb. I suffered a broken hip and severe shock. Lieutenant Anders, the Executive Officer, was wounded, shortly after, both in the hands and throat. His throat wounds were so severe that he had to give commands in writing. He carried on my duties, however, trying to get underway to beach the ship, but her condition rendered this impossible. Lieutenant (j.g.) Geist, the Engineer Officer, was wounded in the legs. Ensign Biwerse not only had all his clothing blown off but also was shocked severely. In addition to the officers wounded, the following members of the crew and one passenger were seriously wounded, three of whom died later: Sandri, Sandra, passenger (died later); Birk, Carl H., electrician's mate first class; Davis, Newton L., fireman first class; Ensminger, Charles L., ship's cook first class (died later); Hebard, Robert R., fireman first class; Hulsebus, Edgar C., coxswain (died later); Land, John H., chief quartermaster; Kozak, Alex, machinist's mate second class; Rice, Kenneth R., electrician's mate first class; Schroyer, Charles S., seaman first class; Ziegler, Peres D., ship's cook first class.

The fifth division of a report on the Panay incident would include the casualties. If warranted, the casualties might be grouped into one paragraph, and the damages to material in another.

6. Because of the action of the Executive Officer, Lieutenant Anders, in continuing his duties effectively while severely wounded and in utter disregard of his personal safety, I recommend that he be given suitable commendation.

/S/ JOHN J. HUGHES

The sixth division is not always a necessary part of an official report. It seems

desirable in the case of the *Panay* incident, however. Normally it would include recommendations or special commendations.

A careful analysis of the phrasing and organization of this report which we call the *Panay* report, should illustrate the practical value of using the underlying principles of composition already described. Since official correspondence must frequently be written under extreme pressure and emotional stress, it is of the utmost importance that the art of official correspondence be made a subject of earnest and thorough study.

20

NAVY PUBLICATIONS

A. FORM AND SCOPE

20A1. Publications helpful to officers. The purpose of this chapter is to acquaint the officer candidate with certain Navy publications with which he should be familiar. (It will prove helpful to examine copies of these publications.) Many of these are issued in loose-leaf form with a special binder, which helps to facilitate the procedure of replacing obsolete pages with corrected (newly printed) pages. (The *Navy Department General Orders* and *Court-Martial Orders* are cumulative.) Other publications are put out in bound books or pamphlets and the new issues which are published periodically, for the most part, replace the earlier issues. They vary in size ranging from small pamphlets to books of several hundred pages.

The most important of the administrative publications, *Navy Regulations*, is discussed in chapters 15 and 16.

20A2. Navy Department General Orders. The *General Orders* include all orders of permanent or temporary nature such as ceremonial orders, commendation of persons in the service (discontinued at present time), promulgation of presidential executive orders affecting the naval service, organization orders, and similar matters addressed to the naval service. The series of General Orders currently in effect is the Series of 1935 which superseded the Series of 1921. All orders of the old series having effective application were reissued and renumbered in the new series. (Prior to 1863 orders and circulars emanating from the Navy Department were not numbered nor regularly issued. However, in that year the first of the seven series of general orders was issued.) General Order No. 1 indicates the disposition to be made regarding orders of the series immediately preceding. Orders issued subsequently are assigned consecutive numbers.

Loose-leaf binders are furnished by the Bureau of Naval Personnel for the printed copies of the *General Orders*. Periodic reprints furnish a list of the orders (numbered) indicating those remaining in effect and those cancelled by subsequent order. When new orders are received, they are added to this list and if they change a previous order, a notation to that effect is made on the order affected. General Orders are usually disseminated by AlNav dispatch or by circular letter in the *Semi-Monthly Bulletin*, and the printed copies are distributed at a later date.

Instructions pertaining to principles or policy of administration are not issued in the General Orders but are promulgated as changes in *Navy Regula-*

tions, it being desirable, so far as practicable, to restrict the number of General Orders issued. They are issued to disseminate information concerning newly established organizations, naval bases, and stations. Instructions relative to budget and appropriations, or regarding allotments to activities or classes of activities may be covered by a General Order. Ceremonials or customs to be observed in certain foreign ports or other instances not covered by an established precedent may require the application of a General Order.

All General Orders are finally prepared in the Office of the Chief of Naval Operations and signed by the Secretary of the Navy. They are vested with full force and effect and are set up for the guidance of personnel in the naval establishment.

20A3. Naval Courts and Boards. This publication includes the instructions governing the procedure of naval courts and boards. These instructions and all changes therein are prepared in the Office of the Judge Advocate General of the Navy. The order promulgating these instructions and forms is signed by the Secretary of the Navy and must be approved by the President of the United States.

This publication gives explicit guidance relative to the convening of and the jurisdiction of courts and boards. Included are instructions for the preparation of precepts, charges, and specifications. Also contained therein are instructions governing the step-by-step procedures of all types of courts-martial, courts of inquiry, and all types of boards. In this connection there are directions for the preparation of records of proceedings and also copies showing record forms which apply to varied situations. Important statutory references are contained in the appendices of this publication.

The organization of the material is as follows: Chapters I to VIII deal with naval law and court procedure; Chapters IX and X deal with the law of misconduct, courts of inquiry and investigation (all closely related); Chapters XI to XIV contain instructions of procedures for boards of medical examiners, naval examining boards, and naval retiring boards; the appendices contain material less frequently used.

The order promulgating this publication and the order for all changes made therein are signed by the Secretary of the Navy and approved by the President of the United States.

20A4. Court-Martial Orders. These are composed of extracts from the records of court-martial proceedings, showing action taken by the Navy Department. They are published for the information of the naval service. In the application of naval law, from time to time, questions arise which must be decided by the Navy Department. Of these decisions, the more important are published in *Court-Martial Orders*. In connection with these orders, an index-digest, embracing the orders of the year, is published annually. The *Naval Digest*, which was published by the Office of the Judge Advocate General prior to 1921, contains a digest of court-martial orders and of important decisions and opinions affecting naval law. Thus it is possible for officers called

upon to apply naval law to find readily the decisions of the department affecting the application of this law.

Occasionally it becomes necessary to overrule, to restrict, or to enlarge the scope of prior court-martial orders. For this reason the latest court-martial order is generally the best authority and should be followed.

All court-martial orders are prepared in the office of the Judge Advocate General, and are signed by the Secretary of the Navy.

20A5. The United States Navy Uniform Regulations. This official publication governs the uniforms of the officers and enlisted personnel of the United States Navy, the United States Naval Reserve, and, as far as the regulations apply, the United States Marine Corps. (The Marine Corps has separate uniform regulations.) *Navy Uniform Regulations* contain:

1. Orders and instructions regarding the uniforms, bags, and hammocks.
2. Description of the uniforms.
3. Detailed specifications of the various articles worn by (male) officers and nurses. (A pamphlet, *Uniform Regulations, Women's Reserve, U. S. Naval Reserve*, 1943, contains details concerning the uniforms of the Women's Reserve.)
4. Lists of the various uniforms with which officers and enlisted personnel should be provided, and articles that combine to make these uniforms.
5. Occasions when the several uniforms should be worn.
6. Descriptions of medals, decorations, badges and ribbons.
7. Rating badges and special markings worn by enlisted personnel.
8. Clothing outfits and ownership markings for enlisted personnel.
9. Notes on the care of the uniform.

A table of contents and an index are included in the publication. The current manual was published in 1941, and an attempt is made to keep it up to date. The regulations and any changes therein are prepared for the Navy by the Chief of Navy Personnel, and for the Marine Corps by the Commandant of the Corps. Orders promulgating regulations and changes must be signed by the Secretary of the Navy.

B. BUREAU MANUALS

20B1. General. The bureau manuals elaborate and expand the content of *Navy Regulations*. They contain administrative and technical instructions relating to matters coming under the cognizance of the bureaus or offices by which they are issued, and in no way alter or amend any provision of *Navy Regulations* or of any *Navy Department General Orders*. Each manual or circular must be signed by the chief of the bureau or head of the office concerned, and then submitted to the Secretary of the Navy for approval.

20B2. Bureau of Naval Personnel Manual. The Bureau of Naval Personnel is charged with the administration of personnel. The manual issued by this bureau is the chief source of regulations pertaining to matters of personnel and it is divided into parts as follows:

Part A—General (Medals, Correspondence and Mailing Lists)

Part B—The Log and Blank Forms

Part C—Officer Personnel

Part D—Enlisted Personnel

Part E—Training

Part H—Naval Reserve

Each of the parts is divided into chapters and the chapters into articles. All articles are numbered with four numerals preceded by the letter designating its part. The first digit indicates the chapter, the second digit the section of the chapter (if sectioned), and the remaining two digits indicate the article. For example: Article D—5237 refers to the thirty-seventh article of the second section of the fifth chapter of part D. The articles in a chapter without sections have a zero as a second digit, as C-7005, specifying the fifth article of the seventh chapter of part C. The article number is generally sufficient for use as reference in correspondence. For example:

“Reference: (a) BuPers Manual, article E-1514.”

or

“Ref. (b) BuPers Manual, art C-4004.”

One working in an office concerned with personnel administration will find that this is the most frequently used publication. Changes are published by means of “Bureau of Naval Personnel Manual Circular Letters” and periodic reprints.

20B3. Other bureau manuals. A list of the other bureau manuals is included although space will not permit a discussion of them.

Bureau of Ordnance Manual

The Bureau of Ships Manual

The Bureau of Aeronautics Manual

The Bureau of Yards and Docks Manual

The Bureau of Supplies and Accounts Manual and Memoranda

Manual of the Medical Department

C. OTHER IMPORTANT PUBLICATIONS

20C1. The Navy Filing Manual. This manual is issued by the Office of the Secretary of the Navy. In it a standard filing system is prescribed for use throughout the entire naval service with the exception of the Marine Corps.

20C2. The United States Navy Travel Instructions. These instructions are promulgated jointly by the Chief of Naval Personnel and the Chief of the Bureau of Supplies and Accounts, subject to the approval of the Secretary of the Navy. The publication contains instructions for payment of travel expenses of naval personnel and their dependents.

20C3. Communication Instructions and Other Classified Publications. *Communication Instructions*, a restricted publication, contains detailed instructions pertaining to acceptable methods of transmitting messages including radio,

visual-searchlight, and semaphore. It is prepared and issued by the Office of the Vice Chief of Naval Operations (Director of Naval Communications).

The *Navy Department Bulletin (Semi-Monthly)*. This is a compilation of official letters originating in the offices and bureaus of the Navy Department, addressed to the service at large. This cumulative publication (collection) forms the chief source of "current instructions" emanating from the Navy Department. The *Navy Department Bulletin—Cumulative Edition* attempts to bring together between two covers in so far as possible all unclassified and restricted circular letters and AlNavs that (a) were addressed to all ships and stations, (b) were in effect on that date, and (c) had not been incorporated in *Navy Regulations*, bureau manuals, or other widely available documents.

The *Standard Navy Distribution List*. The *Distribution List* is a printed pamphlet issued monthly from the Administrative Office (Publication Division) of the Navy Department (Office of the Secretary of the Navy). It is provided for the use of naval establishments in addressing mail to activities ashore and afloat, and serves as a means for disseminating correct mail-list information. The pamphlet contains two sections: Part 1—confidential, pertains to fleet and foreign activities, and is published quarterly; Part 2—restricted, pertains to shore activities.

Fleet and Force Regulations, Instructions, and Orders. The commander in chief of a fleet and commanders of the various forces and units which are a part of a fleet, publish detailed instructions regarding the carrying out of missions assigned to them. Such instructions supplement *Navy Regulations* and, in general, describe the application of the principles laid down in *Navy Regulations* and other Navy Department publications. In addition to the above instructions, which are published in pamphlet or booklet form, information is disseminated by:

1. A book of regulations (fleet) or instructions (force or other units)
2. Fleet or force letters
3. Fleet or force memoranda
4. Campaign and operation orders, with letters of instruction accompanying them.

20C4. The Navy Register and other unclassified publications. The *Navy Register* is published annually (July 1) by the Bureau of Naval Personnel. It is a register of active and retired commissioned officers, warrant officers, midshipmen of the regular Navy, and officers of the Marine Corps. A roster of the active Naval Reserve is published annually and a list of Naval Reserve officers retired with pay because of physical disability is also included.

The *Navy Directory*. This directory is normally issued quarterly by the Bureau of Naval Personnel. Since it contains a register of the ships of the U.S. Navy, ships' rosters of officers, etc., its publication has been suspended for the duration of the current war.

The *Landing Force Manual*. Issued by the Navy Department, this publication

consists of extracts from Army publications adapted to naval terminology and usage. It is designed for the guidance of a ship's landing force when participating in parades, assisting local authorities in times of national disaster, quelling riots, or operating against irregulars. It also incorporates small-arms marksmanship regulations.

The *Bluejackets' Manual*. Originally prepared in 1902 for the instruction of enlisted personnel and revised many times, the *Bluejackets' Manual* contains the conventional lore of the sea and naval experience plus recent developments of importance to the men of our Navy. It contains information especially helpful to recruits. Frequently it is used in examining men for advancement in rating. An alphabetical index is provided in the recent editions. (Among many other helpful books which might be included are *Watch Officer's Guide*, *Naval Administration I*, *Naval Leadership*, *Knight's Modern Seamanship*, *Lovette's Naval Customs, Traditions and Usage*, and *Ageton's The Naval Officer's Guide*. These books, while widely used in the Navy, are not official publications of the Navy Department.)

D. PERIODICALS

20D1. Bureau of Naval Personnel Information Bulletin. This bulletin is the Navy's service magazine and is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. In it appears news of personal importance, such as pay changes, dependency benefits, and opportunities for advancement; letters and answers on matters of direct concern to naval personnel; articles designed to give useful knowledge, such as how to survive at sea; action accounts of naval battles and news summaries of war development; charts, maps, and photographs; communiques; human interest accounts and humor, and chronicles of achievements of naval personnel. Personal copies may be ordered by anyone from the Superintendent of Documents, Washington 25, D. C., at 15 cents per copy, \$1.50 per year.

20D2. Bureau of Naval Personnel Training Bulletin. This publication (formerly the *TraDiv Letter*) is issued monthly by Training, Bureau of Naval Personnel, for the information of personnel engaged in and having interest in training throughout the service. This magazine reports naval training, except aeronautical, and circulates to all instructors (officer, enlisted, or civilian), and to ships in limited numbers. The *Training Bulletin* details programs in effect, and reports on methods and aids developed at training activities that have proved effective. It carries news of the latest training aids, and previews training films. It carries, sometimes in shortened form, new publications or lectures prepared for the training program. It is a distribution medium in that lectures, posters, and charts are sometimes published in the *Training Bulletin* and given no other circulation. It reports functions of divisions within Training, Bureau of Naval Personnel.

Various publications are employed by the different bureaus to disseminate instructional and other information. Two examples follow.

20D3. Naval Firepower. This is a monthly publication of the Bureau of Ordnance, containing material of interest both to naval personnel and to men and women in ordnance plants.

20D4. Monthly Newsletter (restricted). Published by the Bureau of Supplies and Accounts, the *Monthly Newsletter* contains material of especial interest to Supply Corps officers and personnel of all supply activities.

Of the many periodicals containing material appealing to specialized interests, three may be mentioned.

20D5. Recognition Journal (restricted). The *Recognition Journal* is published monthly by the U.S. War and Navy Departments as a training aid in recognition.

20D6. Naval Aviation News (restricted). This semi-monthly publication issued by the Chief of Naval Operations and the Bureau of Aeronautics contains material on technical developments in aviation and naval aviation news.

20D7. The United States Naval Institute Proceedings. This monthly magazine is of general interest to naval personnel. It has as its aim the advancement of professional, literary, and scientific knowledge in the service. While naval officers have taken a vigorous interest in this publication, it is not an official magazine and has no connection with the Navy Department. The issues contain a wide range of interesting items—informative articles, discussions of current problems pertaining to the Navy, and numerous special features. The bound volumes of the *Proceedings* provide a comprehensive record of naval activities since 1873. Any naval historian will do well to consult its index in planning his program of research; he will find here a rich storehouse of history and naval lore.

21

NAVAL TERMS AND CUSTOMS—THEIR ORIGIN AND MEANING

"It's very odd that sailor-men should talk so very queer."

Ingoldsby Legends.

A. NAVAL TERMS

21A1. Introductory. A newcomer to the Navy will probably be surprised when he hears the word *tackle* pronounced "taykle," or *forecastle*, "focsul," or *gunwale*, "gunnel." As a matter of fact, every profession has a language of its own, which to the uninitiated, may seem strange. The Navy is no exception, and its vocabulary is plentifully flavored with salty expressions and uncommon terms.

Likewise, curiosity will no doubt be aroused as to the origin and meaning of certain strange naval customs, traditions and expressions. "Piping the side," "scuttlebutt," and "show a leg" are typical examples. Many of these nautical customs and terms have carried over from the distant past in spite of the fact that the navies of the world have been completely revolutionized during the last hundred years. It is doubly important, therefore, if we are to use naval expressions intelligently, and understand seagoing customs, that we delve into history in order to discover a little about their origin and meaning.

B. ORIGIN, DEFINITION, AND USAGE

21B1. Representative list. The following list is representative of naval terms in use today.

Anchor watch. The origin of this term is interesting. Years ago when ships were equipped with anchor cables of hempen rope and riding lights of oil, special care was taken, while riding at anchor, to see that these lamps were not extinguished, that the cables did not part, and that the ship did not drag her anchor. The watch which was responsible for this particular duty was designated the "anchor watch." The anchor watch, as a sea term, is still retained, although its duties have been changed greatly in the march of progress. Today, a detail on deck at night safeguards the vessel when at anchor, and it is called the anchor watch.

Avast. This word is a corruption of the original form which meant "hold fast" or "stand fast." Today it is an order to stop or cease, as "Avast heaving!"

Aye, aye. The present meaning of this expression, which originally was "yes, yes," (old English) is, "I understand, sir, and I will do it."

Beach comber. Formerly, a loafer or vagrant along the seacoast who searched the beaches for material washed up from wrecked ships, was called a beach comber. Today the term generally refers to a tramp of the sea, an unreliable drifter, or a derelict seaman found unemployed on the waterfront.

Bells. Certain words and expressions preserve for us old customs, as in the instance of bells struck aboard ship. They are not primarily intended to replace clocks for telling time. But they do tell clock time by measuring the periods when certain members of the crew are standing watch.

It all started with the hourglass—which really wasn't an hourglass but a half-hour glass. The quartermaster on watch turned the glass at the end of his first half-hour, ringing an additional stroke each time, until at the end of four hours he rang eight strokes, signaling the completion of his watch and the beginning of the next four-hour watch. So it went during the six watches of the twenty-four hours, ending at midnight. It should be noted, however, that the length of the watch sometimes varies. For example, there are normally two "dog" watches of two hours each between 1600 and 2000. While the hourglass has long since been out of date, the bells are still used on shipboard.

Bilge. This word usually refers to the bottom of a ship, or more correctly the curved part of the ship's hull. It also has another connotation. Midshipmen who are dropped from school for academic reasons are said to be bilged. Thus when used as a verb, the term means to be dropped out of the bottom—in this case the bottom of the class.

Binnacle list. The binnacle list is the sick list. It gets its name from the old nautical practice of placing the sick list on the binnacle each morning so it would be readily available for the Captain.

Bitter end. "Bitter end" was the turn of the cable's end around the bitts. It is now used to define the end of the chain cable which is secured in the chain locker.

Boatswain (pronounced bo'sn). "Swain" or "swein" is the Saxon word for servant or boy. In this instance the word boat refers to the entire ship. (*Coxswain* (pronounced cox'un) has a similar derivation. "Cock" is an old term referring to a type of small boat. Now it is the rating of the lowest deck petty officer, and the name applied to the man in charge of a small boat.)

Boatswain's pipe. The boatswain's pipe, or whistle, is an article of nautical equipment of great antiquity. Originally employed to "call the stroke" in ancient row-galleys, it became, in the early English Navy, a badge of office and of honor. Later, the pipe became the distinctive emblem of the boatswain and his mates. Today the boatswain's mate uses his pipe when the "word is passed," when officers are piped over the side, etc.

Bumboat. A boat employed by civilians to carry salable provisions, vegetables, and small merchandise to ships. The term may have been derived from "boom-boat," indicating boats permitted to lie at buoys.

Captain. This term comes from the Latin "caput" or "head." Until 1862, a Captain was the highest commissioned officer in the United States Navy.

Caulk (commonly pronounced "cork"). The word caulk means to pack a seam in the planking of a ship. When wooden ships were caulked in the dry dock, the workmen usually had to lie on their backs underneath the hull. In this position it was not difficult to fall asleep. To "take a caulk," or to "caulk off," is the sailor's expression for sleeping, or taking a nap.

Chains. Originally chains were used to brace the platform on which the leadsmen stood when heaving the lead. Gradually the term "chains" was used to designate the platform itself. Today, any place where a man stands when heaving the lead, platform or otherwise, is called the chains.

Charlie Noble. This term is applied to the galley smoke-pipe. While its origin is obscure, it is generally believed to have been derived from the British merchant skipper, Charlie Noble, who demanded a high polish on the galley funnel. His bright copper galley funnel became well-known in the ports he visited.

Christening a ship. Launching ceremonies have had a religious significance from the earliest days. The christening ceremony originated as a propitiation to the gods of the elements. In some countries as recent as a hundred years ago a launching frequently resembled a baptismal ceremony and was performed by priests.

Early in the nineteenth century, women and those other than the clergy and high officials began to take part in the ceremony of launching ships.

The civil ceremony usually consists in the naming of the vessel by a sponsor, and at the same time breaking a bottle of wine against the side of the ship as she slides into the water. Women have been known to miss the ship entirely, and so today the bottle is secured by a lanyard to the bow of the ship—as a safety measure for spectators.

Commission pennant. Its origin is said to date back to the seventeenth century when the Dutch were fighting the English. The Dutch admiral hoisted a broom at his masthead, to indicate his intention to sweep the English from the sea. The gesture was soon answered by the English admiral who hoisted a horsewhip, to indicate his intention to chastise the insolent Dutch. The British carried out their boast and ever since, the narrow, or coachwhip pennant (symbolizing the original horsewhip) has been the distinctive mark of a vessel of war and has been adopted by all nations.

The commission pennant, as it is called today, is permanently attached to a small wooden staff. It is blue at the hoist with a union of seven white stars, and red and white at the fly in two horizontal stripes. (The number of stars has no special significance but was arbitrarily selected as providing the most suitable display.) It is flown at the main by vessels not carrying flag officers. In lieu of the commission pennant, flagships fly the commodore's or admiral's personal flag—blue with white stars—according to rank.

Crossing the line. The boisterous ceremonies of "crossing the line" (the equator) are of vintage so ancient that their derivation is lost. It is said that this custom had its origin in propitiatory offerings to the deities of the sea by mariners who thought that gods and goddesses controlled the elements.



Figure 101. Leadsmen in chains coming into port.



Figure 102. Special "crossing the line" ceremonies are held aboard this United States warship as it crosses the equator.

Today when naval vessels cross the equator, those members of the crew, officers and men (called "pollywogs"), who have never before crossed the line, are initiated by the more experienced members of the crew (called "shellbacks"). The usual formula is for the "shellbacks" to attire themselves in strange costumes representing Neptune, Amphitrite, and other creatures of the sea. A court is held among the Neptune's subjects and the novices are summoned to trial. The fate administered to each is in the nature of ridicule, such as a parade of the person's particular idiosyncrasies and a caricature of his foibles. The victim is usually lathered with some frightful concoction, shaved (with a wooden razor) and ducked backward into a tank of water. He is then issued a certificate, signed by Neptunus Rex, documenting the fact that he has "crossed the line" and is now a full-fledged "shellback."

Cut of his jib. The nationality of the early sailing ships was frequently determined by the shape or cut of their jib sails. Use of the phrase as applied to a man originally referred to his nose—which, like a jib, is the first feature of its wearer to come into view. Ultimately it was extended to describe a man's appearance generally.

Dipping of the national ensign. This is a relic of an old-time custom by which a merchant vessel was required not only to heave to when approaching a warship on the high seas, but also to clew up all her canvas. This was to indicate her honesty and willingness to be searched. Delays resulted and in later years the rule of dipping the flag was authorized as a time-saving substitute. Ships of the United States Navy return dip for dip. However, no ship of our Navy may dip her ensign except in acknowledgment of such a compliment.

Dog watch. A corruption of dock watch, that is, a watch which has been docked or shortened.

Dutch courage. This term is of nautical origin and is traced to the days when the Dutch were fighting the English. It was said that the Dutch sailors were given generous libations of the well-known "square-faced gin" before battles. The effect of this practice was called "Dutch courage" by the English.

Eyes of the ship. Ships in the early days generally had in the bow carved heads of mythological monsters or patrons. The fore part of the ship was called the "head." The term "eyes of the ship" followed from the eyes of the figures placed there.

Flag at half-mast. At times of mourning in old sailing days the yards were "cockbilled" and the rigging was slacked off to indicate that the grief was so great that it was impossible to keep things shipshape. Today the half-masting of the colors is in reality a survival of the days when a slovenly appearance characterized mourning on shipboard.

Forecastle (pronounced "focsl"). In the days of Columbus, ships were fitted with castlelike eminences at both ends; one the forecastle, the other the after-forecastle. While both structures have disappeared, the term "forecastle," referring to the same general part of the ship as the original "forward castle," still remains. Its pronunciation has changed.

Grog. Admiral Edward Vernon of the Royal Navy is responsible for the term *grog*. He was in the habit of walking the deck of his flagship in a rough boat-cloak called a *Grogram*. This suggested a nickname for the popular flag officer and Admiral Vernon came to be known affectionately as "Old Grog." In 1740 the Admiral introduced West Indian rum aboard ship and had a mixture of rum and water served as a ration to the crews. It was intended as a preventive against fevers, which so often decimated expeditions to the West Indies. This innovation was received with enthusiasm by the men on the flagship *Burford* who promptly named the beverage after this illustrious leader.

Forty years later verses were composed on the cruiser *Berwick* which bespeak the popularity of the officer and the drink, a quarter of a century after he had died.

The last two stanzas are:

A mighty bowl on deck he drew,
And filled it to the brink:
Such drank the *Burford's* gallant crew,
And such the gods shall drink.

The sacred robe which Vernon wore
Was drenched within the same;
And hence his virtues guard our shore,
And *Grog* derives its name.

Head. The ship's washroom, so named because these facilities in the old days were located in the forward part of the ship.

Holystone. The holystone, as we see it today, is a piece of smooth brick or stone in the side of which a small hole has been gouged. A squilgee (pronounced "squeegee") handle is inserted in this socket, and kept there by the pressure exerted on it while scrubbing the deck. Sand and water are used with the holystone ~~u~~ the wooden deck.

In the early days, the handle was not in use and the seamen knelt on the deck to give it the necessary scouring. The attitude of prayer thus assumed was responsible, many think, for the stone being called "holy." There are those who think that the name comes about as the result of the fact that fragments of broken monuments from Saint Nicholas' church in England were used in the early days to scrub the ships' decks of the British Navy.

Jacob's ladder. This ladder made of rope is used over the side and aloft. It originally led to the skysail. It is said that the allusion was to Jacob's dream in which he climbed up to the sky.

Keelhauling. This term connotes a verbal reprimand; originally it comprised a cruel form of punishment. It consisted in binding the offender hand and foot, attaching weights—causing the body to sink, then drawing it under the ship's bottom from one fore yardarm to the other by means of whips. If the bottom was covered with sharp barnacles the torture was extreme and the punishment often proved fatal. It is said that the indignant protest of the international press late in the nineteenth century banished this practice from the sea.

Lashing broom to masthead. A popular custom in the United States Navy is that of lashing a broom to the masthead of a ship when she has participated in a complete victory over an enemy force (a ship making the highest gunnery or engineering record in the fleet also displays a broom) thus indicating her ability to sweep the seas. A Dutch admiral originated this custom when he sailed against the English fleet in the seventeenth century. Lashed to the foremast of his flagship was a broom with which he boasted he would sweep the English from the sea. (See "Commission pennant.")

Martinet. This term is applied to a stickler for discipline, "a sundowner." It is associated with a French army officer, the Marquis de Martinet.

Mast. The term "Captain's Mast" or merely "Mast" is derived from the fact that in early sailing days the usual setting for this type of naval justice was on the weather deck near the ship's mainmast.

Midshipmen. In the early days the crew was quartered in the forecastle while the officers lived in the aftercastle. The title of midshipmen was originally given to youngsters of the British Navy who acted as messengers and carried orders from the officers aft to the men forward. These lads who had direct contact with the officers were continuously passing back and forth *amidships*, and were gradually looked upon as officer material. They were considered apprentices and often commenced their service as the tender age of eight. The ancient term has survived and today officer candidates at Annapolis (and other midshipmen's schools) are called midshipmen.

Piping the side. To the new officer this heritage from the British Navy seems one of the strangest of all naval customs. It originated in the days of sail, when captains visited one another at sea, and were hoisted on board in a net or basket, when the weather was too rough to permit the use of gangways.

The officer of the deck ordinarily summoned from the crew several hands to assist the visitor in making the landing on deck. If he was young, a lieutenant perhaps, two boys were required to help him; if older, a commander perchance, having increased his girth as well as his rank through the years, he might require four. If, however, he happened to be a captain or an admiral, there is no doubt that he may have required six or eight to enable him properly to secure a stable footing on deck. Thus there came about the custom of having "side boys" to meet returning officers. When the custom became a regulation courtesy, the side was attended equally upon the departure.

The custom of piping the officer alongside and over the gangway is a relic of the piping which was necessary in setting taut and hoisting away the cargo net or basket containing the incoming officer.

Quarter-deck. There is evidence that the marked respect paid the quarter-deck aboard ship today had its origin many hundreds of years ago. In the days of Greek and Roman sea power, obeisances were made to the pagan altar which was placed aft. Later the same respect was paid the shrines of the Virgin similarly located. Still later the "king's colors" which were a symbol of the church and state combined became the object of respect. One is impressed with



Figure 103. The late Frank Knox, Secretary of the Navy, is piped over the side of an American warship during an inspection tour.

the thought that the quarter-deck has always been the honored part of the ship. It has retained its "sanctity" today. (The name "poop deck" is derived from the Latin word *puppis*, a name given the sacred deck where the *pupi* or doll images of the deities were placed.)

Salute (gun). Theoretically all salutes were originally the act of the one who first saluted, rendering himself or his ship powerless for the time during which the honors were rendered. For example, in the days of Columbus, after firing a salute, an appreciable time—approximately half an hour—was required before the guns could be fired again. Thus, the ship first rendering the honors feared no attack and the gesture was one of friendship and confidence. Firing blank cartridges is a comparatively modern invention, occasioned, it is said, by the fact that a complimentary cannon ball once proved fatal to the honored personage. (The "present arms" salute of today was originally a gesture to present the arms for taking.)

Salute (twenty-one guns). The origin of the twenty-one-gun international salute is of interest. Originally warships fired salutes of seven guns, the number seven having probably been selected because of the mystical and symbolical significance given it in the Bible as well as among the principal nations of antiquity.

Although by regulations the salute at sea was seven guns, shore batteries were allowed to fire three guns to the ship's one. The difference was due to the fact that in those days the storage of the powder aboard ship was a matter of serious concern, because of lack of facilities for maintaining low and even temperatures in the magazines. Since powder easily spoiled at sea, but could be better kept on land, three times as many guns were, therefore, prescribed. Again, the figure three was probably selected as a multiple because of its mystical and symbolical significance.

When powder which was not so difficult to preserve at sea came into general use, the number of guns for the naval international salute was raised to twenty-one. By common agreement, the international salutes of all nations are now twenty-one guns.

International salutes grew out of custom and usage. The custom began with the strong nations exacting from foreign vessels acts of submission, sometimes even by force, but in the 17th century the question of such ceremonials became a matter of negotiation. Although saluting was originally forced upon the vessels of smaller nations to compel them to recognize the superiority of the greater, in the final recognition of the principle of equality between nations it became customary to render salutes "gun for gun."

Salute (hand). Numerous and sometimes fanciful are the various origins attributed to the hand salute. One school of thought traces the salute back to a Roman custom at the time of the Borgias. Assassinations by dagger were apparently not uncommon at that time. So it became the custom for men to approach each other with raised hand, palm to the front, thus offering assurance that there was no dagger concealed.

Another school of thought places the origin of the salute in the days of chivalry, when knights in mail, upon meeting others, would raise their visors with their hands, enabling others to see the face. Eventually this gesture came to signify membership in the same order, or at least in a friendly order. It is also believed that, because of the strict gradation in rank, the junior was required to make the first move.

Others place the origin of the salute in the days of chivalry and tournaments. After the Queen of Love and Beauty was crowned, the knights passed in review before her throne. Each knight as he drew near raised his mailed fist to shield his eyes—a subtle way of letting the Queen know that her beauty blinded him.

However, in the American Navy, it seems reasonable that the hand salute came to us directly from the British Navy. There is general agreement that the salute as now rendered is really the first part of the movement of uncovering. From the earliest days of military units, the junior uncovered when meeting or addressing a senior. Gradually, the act of taking off one's cap was simplified into merely touching the cap and finally into the present salute.

Salute over a grave. It is said that originally the three volleys fired into the air were, in accordance with a superstitious custom, supposed to drive away the evil spirits as they escaped from the hearts of the dead. It was thought that the doors of men's hearts stood ajar at such times permitting the devils to enter. The numbers 3, 5, and 7, have had a mystic and symbolic significance from ancient times.

Scuttlebutt. A butt is a cask or hogshead. To "scuttle" means to make a hole in a ship's side which causes it to sink. A "scuttlebutt" in the old days, was a cask which had an opening in its side fitted with a spigot. Well-made casks of oak were utilized to contain fresh water for drinking purposes. This old naval term has survived to this day and now any drinking fountain in the Navy is called a scuttlebutt.

Scuttlebutt rumor. Men naturally congregate at drinking fountains—and rumors start. (A *galley yarn* is a similar term. In the early days the galley was frequently a place of meeting, and cooks had the reputation for knowing and passing on the "news.")

Show a leg. Synonymous with "rise and shine." It is a slang expression used generally by boatswains' mates and masters-at-arms when turning the crew out of their hammocks or bunks.

The call "show a leg" is probably derived from the days (in the British Navy) when women were carried at sea, "the wives of seamen." The women who put out a stockinginged leg for identification were not required to turn out at first call.

The term "show a leg" is frequently used today to mean "make haste."

Sick bay. Nelson, who was responsible for many of the British naval customs, as well as our own, originated the term sick berth in his order to the Mediterranean fleet in 1798. In line-of-battle ships the sick berth was placed in the bows. When the round bows were introduced in 1811 the sick berth, keeping its same position, found itself in a bay (semicircular indentation). Thus in 1813



Figure 104. Firing the final volley during military funeral services.



Figure 105. The scuttlebutt. Members of the crew of the U.S.S. Missouri refresh themselves with a drink of ice water.

began the term sick bay. (It is customary today for officers to remove their caps when entering sick bay. It may be that this custom stems from the early sailing days, when men were not admitted to sick bay until they were about ready for "slipping the cable.")

Smoking lamp. In the old days matches were prohibited to members of the crew, and for their convenience oil lamps were swung in several parts of the ship where they could light a pipe or cigar. (Cigarettes became popular since the War Between the States.)

During the routine of the day, at certain periods of drill or work, smoking was prohibited. It was a simple matter to regulate this practice. The officer of the deck needed only to order the smoking lamps extinguished.

The expression is retained to this day. Before drills, fueling, receiving ammunition, etc., the officer of the deck orders the word passed "the smoking lamp is out," which means "knock off smoking."

Starboard and port. In the old Viking ships, the right side of the vessel (looking forward) was called the "steerboard" side because ships were steered by means of a heavy board which was invariably secured to the right side of the ship. Loading was avoided from that side because of the possibility of damaging the steering gear. Gradually the term "steer board" was corrupted to "starboard."

The left side of these old ships (the place of loading) was called the "load board" side and this finally became "larboard." Because of the fact that starboard and larboard sounded so much alike and this resulted in misunderstanding and accidents, the term "port" was substituted in the United States Navy for the word larboard. A General Order (18 Feb. 1846) reads: "It having been repeatedly represented to the Department that confusion arises from the use of the words 'Larboard' and 'Starboard' in consequence of their similarity of sound, the word 'Port' is hereafter to be substituted for Larboard." (Perhaps the term "port" was used because, as ships became larger and rose higher in the water, loading took place through openings in the sides called ports.)

Sundowner. A sundowner is a harsh disciplinarian, a martinet. The term was derived from the strict captains in the early days who ordered all officers and men to be aboard by sunset.

Tattoo. Derived from the old Dutch "taptoe," meaning the time to close the taps or taverns. At a certain hour the drummers marched from post to post in the town beating their drums; "first post" was the signal given when they had taken their places and were ready to commence their rounds (this survives in the Navy as "first call"), while "last post" was sounded when they had reached the end of their rounds (this survives as our present "tattoo"). The "first call" is sounded ten minutes before "taps"; "tattoo," five minutes before "taps."

Wardroom. It is generally believed that this term also came from the British Navy. Back in the eighteenth century there was a compartment aboard ships near the officers' staterooms which was used as a storage room, particularly for officers' clothing. It was called the "wardrobe" and later corrupted into "ward-

room." When this compartment was empty, and particularly on outbound cruises, the lieutenants met there informally and for meals. Gradually it was used entirely as an officers' mess room and such was the custom when the United States Navy came into being.

Working off a dead horse. This term refers to the old custom of rigging up a stuffed horse and burning it over the side with great glee at the end of several weeks to celebrate the fact that the pay advanced at shipping on had been worked off. After this ceremony the crew started to accumulate wages "on the books." This has become a common expression ashore and a lot of "dead horses" were worked off during the depression.

22

MAKERS OF NAVAL TRADITION

"The worth of a sentiment lies in the sacrifices men will make for its sake. All ideals are built on the ground of solid achievement, which in a given profession creates in the course of time a certain tradition, or in other words, a standard of conduct."

—Joseph Conrad.

A. INTRODUCTORY

22A1. Reminders. A visitor to the Naval Academy at Annapolis is greatly impressed and somewhat awed by the innumerable reminders of our naval heritage. Here repose the remains of John Paul Jones, keeping alive his memory, so that those who follow may go on with lasting inspiration. Here hangs Perry's flag of blue bearing in rough, white, muslin letters Lawrence's famous slogan, "Don't give up the ship." On all sides appear monuments commemorating the names and deeds of great American naval heroes. There is the wide brick walk leading to the Tripoli Monument called Decatur Walk; the gymnasium known as Macdonough Hall; and the massive armory—Dahlgren Hall. Overlooking Chesapeake Bay is Farragut Field, where the Navy football games are played; Porter Road, where the heads of the academic departments have their quarters; and Dewey Basin, from which launches leave to visit ships lying in the bay. There are Luce Hall, Mahan Hall, Maury Hall, and Sampson Hall, which contain the recitation rooms for the midshipmen.

These men, so honored, and many others, are the makers of naval tradition. There is magic in these names, and the midshipmen feel their spell.

B. EARLY TRADITION MAKERS, 1776–1812

22B1. John Paul Jones. Preeminent among tradition makers is John Paul Jones. Of his many contributions to the Navy, none stands out more conspicuously than his display of daring and enterprise. At the time of the American Revolution, in the classic action between Jones's ship, the *Bonhomme Richard*, and the British frigate, the *Serapis*, Jones faced an enemy of vastly superior strength. During the early stages of the battle, a steady flow of cannon fire poured forth at close range, and Jones's rotten old craft was rapidly reduced to a deplorable state. Finally, in a sinking condition, the *Richard* got alongside and lashed. When a gunner in panic cried for quarter and rushed to haul down the American flag, Jones hurled his pistol at the fellow, fracturing his skull and knocking him down the hatch. Captain Pearson of the *Serapis*, having heard the cry, called to Jones asking whether he had struck his colors. Though barely able to keep afloat, Jones thundered back his famous answer, "I have not yet begun to fight." Strangely enough, this proved no idle boast.



Figure 106. John Paul Jones.

After fighting three and one-half hours, the British surrendered; and since no one would venture on deck, Captain Pearson himself hauled down the colors on his battered ship. The spirit of the offensive, the will to victory, was never better demonstrated than by Jones on this occasion. Deeds like this live! And fighting slogans like this live! "I have not yet begun to fight" inspires Americans today as it did more than 150 years ago.

Jones's victories were not mere accidents. He was a driver. He slept scarcely four hours out of twenty-four, while his officers and men served watches of double length. In moments of stress, he mingled with his crew, cheered them on. They thrilled to serve under such a leader and sang as they worked. A shipmate said of Jones: "He was in everybody's watch, and everybody's mess all the time. In fact, I may say that any ship Paul Jones commanded was full of himself all the time."

And what did the British think of him? Lord Sandwich, first Lord of the Admiralty, wrote to one of his commanders, "For God's sake get to sea immediately. If you take Paul Jones you will be as high in the estimation of the public as if you had beat the combined fleets." Such were the proportions of the founder of the American Navy!

22B2. Thomas Truxtun. Thomas Truxtun (1755–1822), who had served as a privateer during the Revolution, was undoubtedly the hero in the undeclared war with France which began in 1798. In the following year, when in command of the *Constellation*, he defeated the *Insurgente* and a little later *La Vengeance*. Truxtun was not only an expert seaman, but a strict disciplinarian as well. In the first of these battles one man was killed and three wounded. Another, however, was killed, not by the enemy but by one of his own officers for leaving his post. The officer explained: "I was obliged to run through the body with my sword, and so put an end to a coward. You must not think this strange, for we would put a man to death for even looking pale on board this ship." This statement, even though an exaggeration, suggests something of the strict discipline aboard Truxtun's ship. (Recently Captain Gatch, after a battle in the Far East reported: "Not one of the ship's company flinched from his post or showed the least disaffection.")

The second of these famous battles was fought at night and lasted from 8:00 p.m. to 1:00 a.m. Serving under Truxtun and in control of the maintop was Midshipman Jarvis, a boy in his teens. When severe damage to the mainmast was reported to him by a sailor who begged him to come down before the spar fell, he replied. "If the mast goes, we go with it. Our post is here." The next roll sent the tall tree splintering over the side, throwing Jarvis to his death far out into the black water.

Congress resolved that Jarvis's loss was a national calamity. Captain Truxtun was given a gold medal and a new command. His formula for victory was simple: Care for your men; see that each understands his duties; exact instant obedience; superintend everything; practice daily with the guns. It was well for the Navy that success should be associated with his qualities; for

success brought a crop of imitators. He set the standards for the new Navy.

22B3. Edward Preble and his "boys." Soon after the war broke out with the Barbary Pirates in 1802, Commodore Edward Preble in the *Constitution* was sent to the Mediterranean in command of a squadron. (He was not widely known at this time, but had fought in the Revolution as a midshipman and as a lieutenant in the Massachusetts State Navy.) An incident occurred at Gibraltar which both delighted and thrilled Preble's young officers. During heavy weather another ship was encountered and each was eager to learn the other's identity without committing herself. After a short interval, Preble shouted: "I now hail for the last time. If you do not answer I'll fire a shot."

"If you do I'll answer with a broadside," retorted the unknown.

"I should like to see you try that! I now hail for an answer; what ship is that?"

"This is His Britannic Majesty's 84-gun ship *Domegal*, Sir Richard Strochan. Send a boat aboard."

"This is the United States frigate *Constitution*, 44, Captain Edward Preble, and I'll be damned if I'll send a boat aboard any ship. Blow your matches, boys."

A little later it was the Briton who sent the boat, and his ship turned out to be only a 32-gun frigate. It was plain that no force or threat of force could overawe Preble; and that was the lesson he taught his young officers.

Preble believed in Truxtun's ideas and expanded them. He introduced iron discipline into the service when it was most needed, through his capacity for leadership, and he became the idol of his officers and men. It is said that not a duel was fought between our officers nor a court-martial ordered during his stay in the Mediterranean. He taught his subordinates the necessity for obedience, courage, and efficiency—doctrines which have continued to be the standards of the American Navy. Preble has often been called the true founder of the American Navy, for his squadron was a training school for most of the young officers who later distinguished themselves in the war of 1812. "Preble's boys," as they liked to be called, were also beloved of their men, and this cordial relationship between officers and men has become a distinguishing tradition of our service.

During the war with the Pirates in the Mediterranean, two dramatic incidents occurred which were influential in molding the traditions of our youthful Navy. The frigate *Philadelphia* had fallen into the hands of the Tripolitans and was now an important addition to their harbor defenses. It was young Lieutenant Stephen Decatur who went to Commodore Preble and volunteered to destroy this noble frigate, built by popular subscription in his home city and first commanded by his father. He, with seventy-four comrades, including Charles Morris, James Lawrence, and Thomas Macdonough, in a small ketch, entered the harbor stealthily at night. Within a few minutes they had complete possession of the ship, the foe having been cut down or driven into the sea. Combustibles were passed aboard, and soon the ship was burning fiercely. Several



Figure 107. U.S.S. Constitution.



Edward Preble.



Figure 108.

Thomas Truxton

minutes later the boarders, with but one man wounded, were back in their ketch and, under fire from shore batteries, they left the illuminated harbor.

Perhaps no act in the first half of the nineteenth century thrilled Americans more than the destruction of the *Philadelphia*. This spectacular feat made Decatur the most striking figure of the time and prompted Admiral Nelson to call it "the most daring act of the age." Indeed Decatur was not only "more universally beloved during his lifetime" than any other American naval hero, but showed extraordinary talent as a military man, as a diplomat and as an administrator. His personal gallantry and chivalrous spirit gave a heroic tone to our Navy, which has come down as a heritage of inestimable value to this very day.

Much more tragic, though quite as heroic, was a second incident in the Mediterranean War. Commodore Preble decided to send the frigate *Intrepid*, fitted up as a floating mine, into a Tripolitan harbor and explode it there, thus destroying the ships and defenses of the town. Captain Richard Somers volunteered to lead this expedition. Fuses were installed which were expected to burn fifteen minutes before igniting the explosives, thus giving the men time to escape in two small boats. No illusions existed as to the danger of the venture and the men disposed of their personal effects before setting out.

A terrible explosion reached the ears of those in the fleet and it occurred, unfortunately, before the party could have arrived at its objective. While no one knows exactly what happened, it seems evident that the "fire ship" was intercepted by the enemy. Rather than surrender themselves and their powder, a match was probably thrown into the explosives and Somers and his gallant crew were blown into eternity. The precious substance of our Navy's tradition has been built on courageous deeds like these.

C. THE WAR OF 1812

22C1. Our Navy's Golden Age. The period of war between the years 1812 and 1815 has been called America's Naval Golden Age. A wealth of tradition accrued during this struggle, and was bequeathed to us as a priceless heritage.

John Rodgers. It was John Rodgers, heading a squadron, who started his cruise and the war by calling all hands to quarters and in sailor-style saying: "Now lads, we have got something to do that will shake the rust from our jackets. War is declared. The rascals have been bullying over us these ten years, and I am glad the time has come when we can have satisfaction." On that strain, the war began.

Isaac Hull. Captain Isaac Hull, commanding the *Constitution*, gained first honors when he met the *Guerriere* under Captain Dacres. During the battle, Hull quietly moved among the officers and men, addressing to them words of confidence and encouragement. "Men, now do your duty," he would say. And every man stood firm to his post. (More than a hundred years later when the great dirigible, the U.S.S. *Akron*, crashed in the Atlantic, the three survivors reported that every man stood firm to his post.)

Within twenty minutes the *Guerriere* had been reduced to a wreck—a feat which astonished both sides of the Atlantic. "Dacres, give me your hand. I know you are hurt," said Captain Hull as he helped his old acquaintance aboard. When the gallant Dacres offered his sword, the victor refused it, as John Paul Jones had done thirty years earlier, saying, "No, I'll not take a sword from one who knows so well how to use it." It was in this battle that our most famous and historic ship received its new name "Old Ironsides."

William Bainbridge. Within a short time, Commodore Bainbridge, took command of "Old Ironsides" and gained a victory over the *Java* in what was probably the fiercest frigate action of the war. Bainbridge, badly wounded early in the fight, refused to leave his station on deck until the *Java* struck her colors.

This was an era when fighting slogans were coined, such as James Lawrence's dying words uttered on the ill-fated *Chesapeake*, "Fight her till she sinks and don't give up the ship." His immortal words became the battle cry of the "Golden Age." Perry carried the watchword to Lake Erie, when he hoisted on his ship the flag upon which were stitched Lawrence's last words, "Don't give up the ship."

Oliver Perry. Soon thereafter, the famous battle of Lake Erie was fought. During the first phases, Perry, with four-fifths of his crew dead or wounded and his ship crippled, faced defeat. At this critical moment, he made his famous passage in an open boat to a new ship, the *Niagara*. Using a surprise maneuver, he sailed aggressively through the enemy's lines and within fifteen minutes, the battle was won—an exhibition of extraordinary energy, ingenuity and fiery courage. According to the newly established custom, Perry returned the swords of the British captains in recognition of the gallant and stubborn resistance they had offered. Then, on the back of an old letter, using his cap for support, Perry wrote in pencil his famous dispatch: "We have met the enemy and they are ours."

Thomas Macdonough. Of equal importance was Thomas Macdonough's brilliant victory over the British fleet on Lake Champlain. As the enemy ships stood in, ". . . young Macdonough, who feared his foes not at all, but his God a great deal, knelt for a moment, with his officers on the quarter-deck." Macdonough's shrewd choice of position, imposing upon the British an approach under a raking fire, and his masterful handling of his fleet in action elicited from Theodore Roosevelt in his *Naval War of 1812* the statement, "Down to the time of the Civil War he is the greatest figure in our naval history." After the battle, this pious officer sent the following dispatch to the Secretary of the Navy: "The Almighty has been pleased to grant us a signal victory on Lake Champlain in the capture of one frigate, one brig and two sloops-of-war of the enemy." Following Perry's example the prisoners were treated with elaborate courtesy. And this too has become one of our outstanding naval traditions, for rarely have we won a victory where our prisoners have not testified to the generous treatment they have received.

William Burrows. Another illustration of the intrepid spirit of the gallant

sea warriors of 1812 is exemplified in the conduct of Captain Burrows of the *Enterprise*. Mortally wounded in an action with the *Boxer*, he lay on the quarter-deck, refusing to leave, and ordered his men to fight on. "Never strike the flag," he cried in agony and another thrilling slogan was added to the Navy's record! Just before his death, this courageous Captain received the sword of the enemy, whereupon he whispered, "I am satisfied, I die contented."

The things that men fight for must never be underestimated. It has been a general rule that naval golden ages are marked by ideals and by a fervent belief in the causes for which men fight. This was true in the War of 1812. In short, it was a willingness to risk all in defense of the principles upon which the new republic had been founded that spurred an infant Navy to face fearlessly the world's largest and most seasoned sea power. Before going into action, it was customary for a Captain to muster his crew aft and make a patriotic speech. Often the men gave three hearty cheers spontaneously when swinging alongside the enemy. Nor was it unusual for the crew, after a stroke of good fortune during battle, to stop fighting momentarily and cheer. Perhaps the chief characteristics of the heroes of the Golden Age were enthusiasm, loyalty, and the will to win.

While overwhelmed by the greatest naval power in the world, our little makeshift Navy fought valiantly. It was a brilliant example of putting into practice our present-day Navy slogan: "Do the best you can with what you have."

D. THE WAR BETWEEN THE STATES

22D1. David G. Farragut. The outstanding hero of the War Between the States was David G. Farragut (1801–1870), also our first admiral. No officer in the service has influenced his successors in so great a degree. Just as officers in the Royal Navy, when facing great crises, seek guidance in the exploits of Nelson, so American officers look to Farragut for stimulation and inspiration.

Farragut, like many others in the early days of the Navy, entered the service when quite young. He was a midshipman before he was ten, had command of a ship (for a brief time) at the age of twelve.

When the War Between the States broke out, he had already served forty-nine years and at this time he was in Virginia awaiting orders. Meanwhile his Southern friends, urging him to espouse the Confederate cause, greatly aroused Farragut's anger. Vehemently he shouted, "I would see every man of you damned before I would raise my hand against that flag." Thereupon, he was ordered to leave Norfolk immediately. "I'll be gone in two hours," he snapped.

Later, Farragut was placed in command of an expedition in the Gulf. It was at Mobile Bay that the incident occurred for which Farragut is best remembered. The Admiral was stationed on the *Hartford*, and during a critical phase of the battle, torpedoes (we would call them mines, today) were reported ahead. Farragut knew that the *Tecumseh* with almost all hands had just gone down in that area. At this point, he shouted, "Damn the torpedoes! Full speed ahead!"



Figure 109. David G. Farragut.

and steamed through the waters where the *Tecumseh* had sunk. Mobile Bay had been forced! That he might command the engagement from the best vantage point and yet not be in danger of falling overboard if wounded, he lashed himself to the rigging with a rope. The entire expedition, planned with consummate care, had a Nelsonian touch. Never were Farragut's own words—"the best defense is a well-directed fire from your own guns"—better exemplified.

22D2. David D. Porter. David D. Porter, Farragut's foster brother, was the son of the famous David Porter of the War of 1812 fame. He saw more continuous fighting than any American naval officer of distinction during the War Between the States. An officer of unusual energy and resourcefulness, Porter rose from the rank of lieutenant at the beginning of the conflict to that of rear admiral at its close. A year later he was a vice admiral and four years thereafter he reached the supreme rank which only Farragut had enjoyed before him. He served four years (1865-69) as Superintendent of the Naval Academy and this period of service has been appropriately termed "an epoch-making administration."

22D3. Franklin Buchanan. In the Mobile Bay battle, like others of this war, Americans met Americans—both nurtured on the same traditions. Facing Farragut on the Confederate *Tennessee* was Admiral Franklin Buchanan, who had served forty-six years in the United States Navy. Buchanan had been the first superintendent of the Naval Academy and the founder of its traditions. As Commanding Officer of Perry's flagship he was the first to land officially in Japan. He was the first to command an ironclad (the *Virginia*) in battle, and finally rose to the highest naval rank in the Confederacy. There is a familiar ring in the words of this courageous, magnetic leader delivered to his crew before the battle: "If I fall, lay me on one side and go on with the fight, and never mind me, but whip and sink the Yankees, or fight until you sink yourself."

E. PEACETIME HEROES

22E1. Matthew Fontaine Maury. Many officers not noted as war heroes have served their nation and their Navy with distinction. These have been peacetime heroes and they too have added breadth and depth to the great current of tradition.

Chief among these peacetime contributors was Matthew Fontaine Maury. In the field of science, no officer in the nineteenth century rendered a service equal to this "Pathfinder of the Seas."

Starting as a midshipman in 1825, Maury served a number of years at sea. During this period he was shocked to learn that practically no information was available to aid the mariner in respect to winds, currents, best courses, etc. In 1839, Maury sustained an injury which rendered him unfit for further sea duty. Heartbroken over this misfortune, he wisely turned his talents to science.

In the early forties, the Navy Department appointed him superintendent of the Depot of Charts and Instruments in Washington. He soon conceived

the unique idea of collating available data found in the numberless old log books stored in the Navy Department. These he supplemented with observations made several times daily by ships in our Navy as well as by American and foreign merchant ships. Navigators were instructed to cast overboard at stated periods bottles containing a record of the ship's latitude, longitude, and date. They were requested to pick up similar bottles, wherever found, noting the exact position and time, and then to forward these data to Washington. With this information at hand, Maury drew important conclusions about winds and currents, paths of storms, quickest routes between great shipping ports, and other fundamentals of modern navigation. To this day, Maury's pilot charts, brought up to date, are indispensable in making ocean travel safe and expeditious.

In 1844, he centered attention on the little-known Gulf Stream, the "river in the ocean." Furthermore, he outlined the system of naval education, which in its main essentials, is still in practice at our Naval Academy. So helpful was Maury in the work of laying the Atlantic cable that Cyrus W. Field said: "Maury furnished the brains, England gave the money, and I did the work." His interests extended to mineralogy, geology, astronomy, exploration, and many other fields. His conception of the wide range of interests that the Navy should embrace is found in his own words: "Navies are not all for war, peace has its conquests, science its glories; and no Navy can boast of brighter chaplets than those which have gathered in the fields of geographical exploration and physical research."

Though he always worked against great opposition, it is hardly an exaggeration to say that Maury organized almost the entire Navy for scientific research. Maury's philosophy is summed up in his own words: "When principle is involved, be deaf to expediency."

Maury's contribution gave impetus and direction to the Navy's collateral work during times of peace. It has been followed by continuous effort in exploration, oceanography, astronomy, and other fields. Greeley, Peary, and Byrd pursued discovery until the American flag was planted at both poles by men of the naval service. The Hydrographic Office has continued with navigational and astronomical studies, and the distribution of its publications. *Bowditch* has been extended through many editions by the United States Navy. *The Nautical Almanac* was prepared in a Navy office. *The Air Alamanac*, *The Pilot Charts*, H.O. 214 all furnish evidence of the Navy's continuing interest in the safety, ease, and comfort of all hands at sea.

22E2. John A. Dahlgren. Another officer whose greatest contribution was made in peacetime (in the main before the War Between the States) was John A. Dahlgren (1809-1870), often called the father of modern ordnance and gunnery. Against strong protest from the service, he introduced his reforms. It was he who contributed the first big guns (9" and 15"), advocated the first real sights, and urged the rifling of cannon. Indirectly, he was partially responsible for the construction of ironclads. The Dahlgren gun was the most



John A. Dahlgren.



Matthew F. Maury.

Figure 110.

widely used type in the Union Fleet during the War Between the States. An account in a London paper of the *Kearsarge-Alabama* duel said that it was a "contest for superiority between the ordnance of Europe and America" in which the Dahlgren guns of the *Kearsarge* showed marked superiority.

A scientist and an inventor, an officer of genius and unusual force, Dahlgren finally succeeded in arousing the service from its lethargy. His career was not a romantic story, nor was he a popular hero, but his enthusiasm and his love for the Navy have rarely been surpassed. He, too, created tradition. During his last hours, his mind reverted to his beloved naval profession, and he said softly, "The officer should wear his uniform, as the judge his ermine, without a stain." This observation could be applied to few more fittingly than to Dahlgren himself.

Two noble monuments bear his name—Dahlgren Hall, the ordnance and gunnery building at the United States Naval Academy, and Dahlgren, Virginia, our great naval proving ground.

22E3. Alfred T. Mahan. The third and last of the great peacetime naval contributors to be considered is Alfred T. Mahan. His story as a line officer is uneventful. However, he occupies the supreme position in the Navy as a writer and his particular theme is sea power.

Soon after the Naval War College was founded at Newport, Rhode Island in 1884, Mahan was ordered there as an instructor. This institution had been largely the result of the work of the Navy's outstanding educator, Stephen B. Luce, who had earlier organized the Navy's apprentice training system. It was Luce's conviction throughout his life that the Navy should be an educational institution for all hands. In general, the service was skeptical of this postgraduate school. As one old timer said: "Teach the art of war! Well, I'll be damned! You have Cooper's Nautical History, what more do you want?" However, notwithstanding, the college expanded and Mahan's lectures became world famous.

In 1890 Mahan published his first great work, *The Influence of Sea Power upon History, 1660-1783*. This was received with great enthusiasm in Great Britain. In Germany, the Kaiser wrote:

I am just now not reading but devouring Captain Mahan's book; and I am trying to learn it by heart. It is a first class work and classical in all points. It is on board all my ships and constantly quoted by my captains and officers.

In Japan, Mahan's works were promptly translated into their language and it is said that Japanese midshipmen read Mahan in the original to learn English. His fame spread around the world and his works rapidly reshaped the navies of the great powers. More effectively than anyone else, he pointed out to the American people their naval needs. He taught the Navy to study and write and a multitude have followed his distinguished example.

If naval history means anything it means that victories are won chiefly by what has been done before the actual shooting begins. So our Navy owes its preeminent position today no less to the unheralded reformers who strove against

the reactionary forces within, than to the more popular heroes of war. These reformers and many others did not look back complacently on the Navy's past glories; they were not content to coast on its reputation. They were disturbed and moved to action by the greatness of the task that always lies ahead. Their pride at what had been done was always paralleled with an overwhelming sense of the magnitude of the job that had yet to be done. They consecrated their lives to one ideal: "The fighting efficiency of the Navy, and its instant readiness for war." While seldom slogan-makers, they were often tradition-makers. Mahan belongs to this latter group.

F. SPANISH-AMERICAN WAR

22F1. Richmond P. Hobson. Now, to continue with the men of action. Two events in the Spanish-American War are reminiscent of the naval golden age. In the spring of 1898, Admiral Cervera's fleet was trapped in Santiago harbor. It was Admiral Sampson's plan to close the neck of the narrow harbor and then have the army cut the ground from under the enemy. On the night of June 3, Lieutenant R. P. Hobson accompanied by seven volunteers, clad in underclothes, set out in the old collier *Merrimac* containing torpedoes placed below the water-line. By means of electricity, these were to be exploded, thereby sinking the ship in the narrow neck while Hobson and his crew got away in a small boat. A hail of shots promptly greeted the *Merrimac* at close range from the fort above them. Under this infernal fire, they proceeded. When almost at their goal, a chance shot disabled the steering gear. The ship, out of control, drifted into deep water and sank. Although this expedition ended in failure like that of the *Intrepid* under Somers almost a hundred years earlier, the sheer boldness of the act and the heroism of Hobson's little band was cordially applauded by the nation. Even Admiral Cervera, who picked up the adventurers, only two of whom were wounded, sent his hearty congratulations to Admiral Sampson. Those who follow the sea feel a brotherhood with seamen of all nations—a pride of profession.

22F2. George Dewey. A short time prior to the preceding incident, Commodore Dewey's name became immortal at the famous battle of Manila Bay. On that occasion, the Spanish Admiral knew that Dewey's fleet was somewhere in the vicinity. However, he didn't suspect that the American Commodore would have the audacity to steam into a mined harbor during the night, with forts on either side, and the Spanish squadron ready to receive him.

While laying his plans, Dewey said he tried to figure out what Farragut would have done when so confronted, for Farragut had been the inspiration of his life. The influence of a great leader is borne out in Dewey's statement: "Valuable as the training of Annapolis was, it was poor schooling beside that of serving under Farragut in time of war." At Manila, Farragut, although long dead, was his leader—his great spirit still lived.

Following a thorough study of the situation, Dewey decided to make a daring move, and as it turned out, this unexpected blow, so timed, was half the victory.

His instructions were, "We shall enter Manila Bay tonight, and you will follow the motions and movements of the flagship, which will lead."

At 5:40 a.m., when the range had been reduced to two and one-half miles, Dewey, standing on the bridge of the *Olympia*, quietly gave the order, "You may fire when you are ready, Gridley." By noon, not a single Spanish fighting ship remained afloat. While it is true that the enemy defense was notoriously inefficient, nevertheless, this was a signal victory. Within a year, Dewey was made an admiral of the Navy, following in the steps of Farragut, who had earlier been appointed Admiral by Congress. Dewey lives in naval history as a resolute and able commander.

The two great victories of the Spanish-American War, Santiago and Manila, were brought about by the same factors that enabled Perry to win at Lake Erie, Macdonough to win at Lake Champlain and Farragut to win at Mobile Bay. These victories were not due to the spectacular incidents of the battles, but simply to forehandedness and hard work. In the words of Admiral Dewey: "It was the ceaseless routine of hard work and preparation in time of peace that won Manila and Santiago."

G. TURN OF THE CENTURY

22G1. William S. Sims. The last individual to be considered is Admiral William S. Sims, who contributed to the naval service both in peace and in war.

Like Maury, Dahlgren, and Mahan, Sims encountered opposition to his progressive ideas from the Navy itself. It is not surprising that many of his superiors, comfortably settled in conventional routine, regarded him as an intolerable nuisance. He was always seeing something that needed correction. He was the stormy petrel of the Navy. Two examples will suffice.

At the turn of the century our deplorable showing at target practice worried Lieutenant Sims. As a result of long study upon the subject, he became convinced that he could improve the situation. When Theodore Roosevelt entered office (1901), Sims was vainly struggling to get a hearing at the Navy Department. Finally, at the risk of his career, he took the unprecedented step of writing directly to the President. Changes soon followed. Sims revolutionized fleet gunnery, influenced the design of our first all-big-gun battleship and introduced new and improved destroyer tactics. Reforms in range-finding, spotting, and target practice were adopted with such success that our gunnery improved at least 100 per cent within a few years.

Next, Sims, after setting forth the crying need for modification in ship construction, was instrumental in bringing about important changes. Thus the United States Navy took the lead not only in gunnery, but in ship design as well.

It was Admiral Sims who had been influential in getting the Navy in shape for the First World War. He was also selected to command the United States forces in European waters during the war and he achieved an outstanding organization of American and British naval operations. Sims exercised a lasting



William S. Sims.

Figure 111.

Alfred T. Mahan.



influence upon officers and men who served under him. Like Farragut and Nelson, he received enthusiastic and loyal support from his subordinates.

H. WORLD WAR I

22H1. "We are ready now, Sir." Within a month after the declaration of war in 1917, six American destroyers, under Commander Taussig, steamed into Queenstown. Considering the long, arduous ocean voyage, it is little wonder that the British Admiral was taken aback with the American's answer when he asked, "How soon will you be ready to go on patrol?" Taussig's reply, which characterized the Navy during the war and has since become a Navy slogan, was, "We are ready now, Sir." It indicated the same careful preparation and planning we observed with Decatur and the *Philadelphia*, with Farragut in the Gulf, and Dewey at Manila.

22H2. The Cassin incident. In October 1917, the destroyer *Cassin* was patrolling off the Irish coast. Gunner's Mate O. K. Ingram suddenly spied a torpedo coming from a German submarine toward the stern of the *Cassin*. He realized that, if the missile struck the vessel where the depth charges were stowed, the ship would be blown up. Instead of saving himself, he deliberately rushed aft to throw the charges overboard. The torpedo found its mark, the destroyer's stern; detonated, set off the depth charges still on board, killed Ingram, and temporarily disabled the ship. This bluejacket sacrificed his life to save his ship and the lives of the officers and men on board. The destroyer *Ingram* commemorates his name.

I. THE CONTINUITY OF NAVAL TRADITION

22I1. Deeds of today are the inspiration of tomorrow. Today, we are in a global war and in the greatest period of expansion the Navy has ever experienced. The finest traditions of the service are being sustained. In the Pacific, early in this war, when it became evident that the *Lexington* was doomed, it was with a heavy heart that Admiral Fitch made plans to abandon his ship. At the final moment, he turned quietly to his Captain and said, "Well, Fred, I guess it's time to get the boys off." We wonder whether he visualized Admiral Dewey at Manila Bay in 1898 leaning over the bridge and casually saying: "Fire when you are ready, Gridley." Dewey later said that he had thought, at that critical moment, "What would Farragut do?" The Admiral knew well the answer, for he, as a young lieutenant, had served under Farragut during the War Between the States. At Mobile Bay, when torpedoes were reported ahead, Farragut shouted, "Damn the torpedoes! Full speed ahead!" Farragut, in turn, at the age of twelve, learned his lessons from Commander David Porter in the War of 1812. Porter, again, had served under the brilliant Thomas Truxtun in the war with France in 1799 when the *Constellation* defeated the *Insurgente*. Truxtun, as we know, was a contemporary of John Paul Jones and both fought during the Revolutionary War. Such is the unbroken chain of our great Naval Tradition. The deeds of today become the inspiration of tomorrow.

A letter was received some time ago from Marine Lieutenant Anthony Tortoras, an aviator at Guadalcanal. A postscript in this letter addressed to his parents reads as follows: "Always pray, not that I shall come back, but that I will have the courage to do my duty." He will not come back and he has done his duty. And so another link has been added to the continuing chain of our Naval Tradition.

In closing, it is appropriate to turn to the words of Rear Admiral Albert Gleaves, U. S. N.:

"May we not who are of their brotherhood claim that in a small way at least we are partakers of their glory? Certainly it is our duty to keep these traditions alive and in our memory, and to pass them on untarnished to those who come after us."



APPENDIX



APPENDIX

A. DECORATIONS, MEDALS, AND RIBBONS

MANNER IN WHICH RIBBONS ARE WORN. The following is a summary of the regulations governing the issuance and wearing of awards now designated for naval personnel. It should be noted that during time of war, only the ribbon bars of the decorations and medals are worn, even for full-dress occasions. Reproductions of these in full color will be found in the back of this book.

Ribbons of decorations, medals, and badges are worn in horizontal rows of three each. The rows should be one-quarter inch apart. Any row with less than three ribbons becomes the top row and is centered over the row or rows beneath it.

The ribbons are to be worn on the left breast clear of the lapel, as far as practicable. The upper edge of the main, or bottom, row should be on a line one inch below the point of the shoulder (a point halfway between top and bottom of the shoulder joint, where the sleeve is joined).

The arrangement by seniority (see table, Fig. 113) is from the top down and from inboard outboard. For wearing of Army or foreign decorations, see page 395.

Drawings below show the manner in which ribbons are worn:

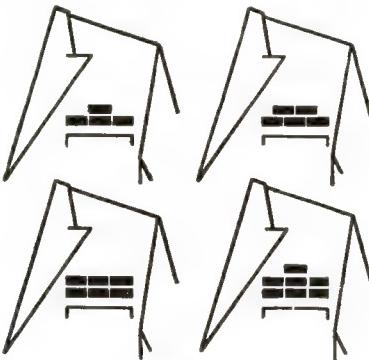


Figure 112.

STARS, SERVICE CLASPS, ETC. Gold, silver, or bronze stars, service clasps, and letters (such as "A" and "W") are authorized to be worn on various medals and service ribbons. Numerals are not authorized.

No more than one decoration of the same type may be awarded to any one person, but in lieu of a subsequent award of the same decoration, a gold star is awarded, to be worn on the ribbon.

Stars, clasps, and letters are authorized for other medals and ribbons as follows:

Expeditionary Medal (Navy, Marine Corps): A bronze star is worn for each expedition in excess of one. Navy and Marine Corps personnel who served in the defense of Wake Island, 7 to 22 December 1941, wear a silver "W" on the appropriate Expeditionary Medal ribbon.

Victory Medal (World War service medal): Service clasps and battle clasps, to be worn on the ribbon of the medal, are authorized for each person who performed any of the duties designated in *Bureau of Naval Personnel Manual*, Art. A-1037, par. (2). Clasps for service on ships are awarded as shown in the list in paragraph (5) of the same article.

No one is entitled to more than one service clasp, or to more than one Meuse-Argonne battle clasp. A bronze star is worn on the service ribbon bar in lieu of any clasp authorized.

When any person has been commended by the Secretary of the Navy, as a result of the recommendation of the board of awards, for performance of duty during World War I not justifying the award of a Medal of Honor, a Distinguished Service Medal or a Navy Cross, he wears a silver star for each such citation.

A bronze Maltese cross is placed on the service ribbon for those officers and men of the Marine Corps and Medical Corps, United States Navy, who were attached to the American Expeditionary Forces in France any time between 6 April 1917 and 11 November 1918, and who are not entitled to any battle clasp provided for by General Order No. 83, War Department, 30 June 1919.

American Defense Service Medal: A service clasp, "Fleet" or "Base," is worn on the ribbon of the medal by those who, between 8 September 1939 and 7 December 1941, inclusive, performed duties set forth in the following paragraphs. No such person is entitled to more than one such clasp.

1. *Fleet*. For service on the high seas while regularly attached to any vessel or aircraft squadron of the Atlantic, Pacific, or Asiatic Fleets; to include vessels of the Naval Transportation Service and vessels operating directly under the Chief of Naval Operations.

2. *Base*. For service on shore at bases and naval stations outside the continental limits of the United States. (Includes duty in Alaska.)

A bronze star is worn on the service ribbon in lieu of any clasp authorized.

Navy, Marine Corps, and Coast Guard personnel who served on vessels in actual or potential belligerent contact with Axis forces in the Atlantic Ocean (as listed in *Bureau of Naval Personnel Manual*, Art. A-1042) wear a bronze "A" on their service ribbon in lieu of the bronze star.

Naval Reserve personnel on training duty under orders must have served at least 10 days in such duty. Persons ordered to active duty for physical examination and subsequently disqualified are not entitled to the American Defense Service Medal. Reserve officers ordered to ships of the fleet for training duty (cruise) and officers serving on board ships for temporary additional duty from

shore stations are not considered "regularly attached" and are not entitled to the fleet clasp.

Area campaign medals (American, European-African-Middle Eastern, Asiatic-Pacific): A bronze star is worn on the service ribbon for certain authorized operations and engagements (complete list to date appeared in the *Bureau of Naval Personnel Information Bulletin*, October 1944, p. 66). For five or more such operations or engagements, a silver star is worn on the ribbon in lieu of each five bronze stars authorized.

Good-Conduct Medal: A Good-Conduct Medal is issued as the first award to an individual and a pin for each subsequent award. A bronze star is worn on the service ribbon for each good-conduct pin that is received.

Naval Reserve Medal: A bronze star is worn on the ribbon for each *additional* 10 years of honorable service.

Commendation Ribbon: A second authorization, and each succeeding authorization, to wear the Commendation Ribbon is represented by a bronze star on the ribbon.

ARMY RIBBONS. Ribbons of medals and badges awarded to naval personnel by the Army, or won by naval personnel during previous service in the Army, may be worn on naval uniforms in proper order of seniority.

Some of the Army awards, and the Navy ribbon they follow when worn by naval personnel, are: Medal of Honor (follows Navy's Medal of Honor), Distinguished Service Cross (follows Navy Cross), Distinguished Service Medal (follows Navy's DSM), Soldier's Medal (follows Navy and Marine Corps Medal), and Distinguished Unit Badge (follows Presidential Unit Citation).

The Army's Distinguished Unit Badge is worn by Army personnel on the right breast. However, when awarded to naval personnel, it is worn on the left breast along with other ribbons. Anyone who served in the defense of the Philippines at any time between 7 December 1941 and 9 April 1942 is eligible for this badge and may apply to the Bureau of Naval Personnel via his Commanding Officer.

Anyone who has good reason to believe he is entitled to any other Army medal (such as the Good-Conduct Medal) for previous Army service may have this determined by the Decorations Section, Adjutant General's Office, War Department. Any letters sent there should be via the Commanding Officer.

FOREIGN DECORATIONS. Congress has authorized officers and enlisted men of the United States armed forces, during the present war and for one year thereafter, to accept and wear any decoration, order, medal, or emblem which is bestowed upon them by the government of a co-belligerent nation or of an American republic, and which is conferred by such government upon members of its own armed forces.

Any such decoration or award should be tendered through the Department of State, and not to the individual in person (except immediate combat awards in the field, which may be cleared through the senior local American commander).

**RELATIVE STANDING OF DIFFERENT AWARDS
SHOWING ORDER IN WHICH THEIR RIBBONS ARE TO BE WORN**

DECORATIONS

1. Medal of Honor
2. Medal of Honor (1917-18) (by law no longer authorized for award)
3. Marine Corps Brevet Medal
4. Navy Cross
5. Distinguished Service Medal
6. Legion of Merit*
7. Silver Star Medal
8. Distinguished Flying Cross
9. Navy and Marine Corps Medal
10. Bronze Star Medal
11. Air Medal
12. Commendation Ribbon
13. Purple Heart
14. Specifically Meritorious Medal (no longer awarded)
15. Presidential Unit Citation
16. United States of America Typhus Commission Medal (awarded by the President)
17. Gold Life-saving Medal (awarded by the Treasury Department)
18. Silver Life-saving Medal (awarded by the Treasury Department)

* Legion of Merit is awarded U. S. Armed Forces without reference to degree; others are awarded the Legion of Merit in four degrees: Chief Commander, Commander, Officer and Legionnaire.

COMMEMORATIVE MEDALS

1. Dewey Medal (commemorating Battle of Manila Bay)
2. Sampson Medal (commemorating naval engagements in the West Indies)
3. NC-4 Medal (commemorating the first transatlantic flight of the U. S. flying boat in May 1919)
4. Byrd Antarctic Expedition Medal 1928-30)
5. Second Byrd Antarctic Expedition Medal (1933-35)

SERVICE MEDALS

1. Civil War
2. Expeditionary Medal (Navy and Marine Corps; initial award, 1874)
3. Spanish campaign

4. Philippine campaign
5. China Relief Expedition
6. Cuban Pacification
7. Nicaraguan campaign, 1912
8. Mexican service
9. Haitian campaign, 1915
10. Dominican campaign
11. Victory Medal
12. Army of Occupation of Germany Medal (1918-23)
13. Haitian campaign, 1919-20
14. Second Nicaraguan campaign
15. Yangtze service
16. China service
17. American defense service
18. Area campaign medals (worn in order as earned, but in their seniority as regards other medals and ribbons):
 - (a) American area
 - (b) European-African-Middle Eastern area
 - (c) Asiatic-Pacific area

MISCELLANEOUS MEDALS

1. Good-Conduct Medal (Navy, Marine Corps or Coast Guard)
2. Bailey Medal
3. Naval Reserve Medal (or Marine Corps Reserve)
4. Medal for Merit (civilians only)

GUNNERY MEDALS

1. Edward Trenchard section Navy League Medal*
 2. Knox Gun-Pointer Medal*
- * Discontinued for the duration.

SMALL-ARMS MEDALS AND BADGES

1. Navy Distinguished Marksman Gold Badge, or Navy Distinguished Pistol Shot Gold Badge
2. Navy Expert Rifleman Medal (or Coast Guard)
3. Navy Expert Pistol Shot Medal (or Coast Guard)

(Note: No other small-arms medals or badges are represented by ribbons.)

Figure 113.

However, if a decoration is tendered under circumstances where refusal to accept would cause embarrassment to the power conferring it, it should be accepted "pending approval," and then forwarded, together with a full report of the circumstances, to the Bureau of Naval Personnel.

Foreign decorations or medals are worn to the left of all American decorations or medals, and may not be worn unless at least one American decoration or medal is also worn.

Naval personnel who won the right to wear the French Fourragere by serving in units awarded it in World War I may wear it with their naval uniforms under certain conditions. For details see *Bureau of Naval Personnel Information Bulletin*, August 1944, p. 71.

MERCHANT MARINE. The following ribbons, listed in order of precedence, have been authorized for Merchant Marine service in this war and may be worn by naval personnel who earned them while serving in the Merchant Marine: Merchant Marine Distinguished Service Medal, Meritorious Service Medal, Gallant Ship Unit Citation Ribbon, Mariner's Medal, Combat Bar, Atlantic War Zone Bar, Mediterranean-Middle East Zone Bar, Pacific War Zone Bar, and Merchant Marine Defense Bar. The three war zone bars are worn in order earned.

GOOD-CONDUCT MEDALS. Good-Conduct Medals are issued to enlisted personnel by the Bureau of Naval Personnel. A medal is issued as the first award to an individual and a pin for each subsequent award.

Men with clear records (no offense or qualifying remarks entered in service record) and with a final average of 3.5 in proficiency in rating are eligible to receive good-conduct awards for service terminating on or after 1 July 1931 as follows:

1. For first enlistment or minority enlistment, and if extended for two years, the last four years in lieu thereof may be considered, provided the first period of service would have terminated with an honorable discharge.
2. For second or subsequent enlistment or extensions of three or four years.
3. For a total of four years served in extensions of an enlistment.
4. In a six-year enlistment, for the first three years and also for the remaining period of the enlistment, provided the enlistment terminates with an honorable discharge.

Service in extensions of one or two years (except as indicated in (1) and (3) above) or for enlistments terminated prior to expiration (except when discharged for convenience of the government within three months of expiration of enlistment) will not be considered for good-conduct awards.

Enlisted men of the Naval Reserve whose records and marks fulfill the requirements prescribed here for regular Navy are eligible and may be recommended for good-conduct awards after each three-year period of continuous active service in time of national emergency and/or war.

Good-conduct pins are worn on the ribbon of the medal. One bronze star is worn on the service ribbon for each good-conduct pin received.

For service terminating on or after 1 July 1921 and prior to 1 July 1931, good-conduct awards will be made in accordance with the requirements as to marks and recommendations in effect at the time of service and in accordance with service requirements as follows:

1. For first enlistment, or for minority enlistment, provided the enlistment is extended, or upon reenlistment within three months.
2. For first enlistment if honorably discharged from service begun in the

Naval Reserve Force, and continued in the regular Navy by transfer, provided that the service in the Navy is of not less than two years' duration and that reenlistment is under continuous service.

3. For a second or subsequent enlistment, previous enlistment having terminated with honorable discharge. Continuous service is not necessary.

4. Upon discharge from an extension of four years (or a total of four years) of a first or other enlistment, provided that basic enlistment would have terminated with an honorable discharge.

5. For a constructive enlistment of four years (or three years and nine months) of active duty begun in the regular Navy and continued in the Naval Reserve (classes F3, F4, and F5), or where a retired man is recalled and completes not less than three years and nine months of active duty.

For service ending before 1 July 1921, see *Bureau of Naval Personnel Manual*, Art. A-1046.

If a man has any question about his eligibility for a good-conduct award which does not seem to be covered here or in *Bureau of Naval Personnel Manual*, Art. A-1046, he should consult his Commanding Officer. If a further ruling or interpretation is required, the question should be referred through the proper channels to the Bureau of Naval Personnel.

SERVICE STRIPES—Worn by enlisted men on the left sleeve of coats and jumpers. One service stripe is worn for each four years of active service in regular Navy or Naval Reserve. Although not a decoration or medal, the service stripe is included in this section because of its relation to the Good Conduct Medal previously discussed.

The stripes are seven inches long, of scarlet cloth when worn on blue clothes, of blue twill when worn on white, khaki, or grey clothes.

Stripes are stitched on the sleeve diagonally across the outside of the forearm at a 45-degree angle. On coats, the lower end of the first stripe shall be not less than two inches from the cuff end of the sleeve; on jumpers, it shall be four inches above the upper edge of the cuff.

Gold lace service stripes are worn (1) by enlisted men holding three consecutive good conduct awards or with 12 years' *continuous* service during which time records have been maintained with marks and qualifications equivalent to those necessary for the receipt of good-conduct awards, provided that in no case shall a man with less than 12 years' service be entitled to wear the gold lace stripes; (2) by enlisted men of the Naval Reserve who perform continuous active duty, maintain the required marks, and meet the foregoing qualifications.

UNIT CITATIONS. The Presidential Unit Citation may be awarded to a ship, aircraft or other naval unit, and to any Marine Corps aircraft detachment, or higher unit, for outstanding performance in action on or after 16 October 1941.

Under original regulations, the ribbon could not be worn until after the second unit citation. This was modified by AlNav 137-43 as follows:

1. When a unit has received the Presidential Unit Citation, all personnel serving in that unit during the occasion for which cited, or any part thereof,

wear the citation ribbon with one star permanently, regardless of where they serve.

2. Such personnel wear an additional star for each additional citation of the unit upon which they serve during the occasion for which the unit is cited, whether it be the same or another unit.

3. Personnel who subsequently join a unit which has been cited wear the plain citation ribbon without star and only while attached to that unit.

4. Flag officers and members of their staffs serving in a unit upon the occasion for which cited, or any part thereof, are included in the citation.

When medals are worn, the Presidential Unit Citation is worn on the right breast; otherwise, on the left, with other ribbons.

The insignia for units cited is a burgee pennant of blue, gold and scarlet.



Figure 114. Burgee pennant design for Presidential unit citation.

Ships, aircraft, and tank units, etc., display a bronze plaque with this design centered above the engraved citation (individual planes and tanks may paint the design in a suitable place). For companies, battalions, regiments, etc., a battle streamer is authorized, with the citation engraved upon the standard.

In time of peace, ships may also fly the pennant itself, and may display a painted pennant of insignia design from some place on the top hamper so as to be visible to other units.

If a unit is cited more than once, a blue star is added for each extra citation, up to a total of five stars.

Commanders of forces afloat make recommendations to the Secretary of the Navy via official channels for the Presidential Unit Citation for units of their commands deemed worthy of it. Units must perform services in action above and beyond the high standard expected of our forces and outstanding as compared to services of comparable units in the same or similar actions.

Decorations, Medals and Badges

(in addition to United States Navy decorations previously mentioned)

United States of America Typhus Commission Medal. May be awarded by the President of the United States or at his direction to any person who may render or contribute meritorious service in connection with the work of the Typhus Commission. (Executive Order No. 9285 of 24 December 1942.)

LIFE-SAVING DECORATIONS (awarded by Treasury Department).

NAVAL ORIENTATION

TABLE OF NAVAL DECORATIONS AND REGULATIONS

NAME OF MEDAL AND RIBBON	TO WHOM AWARDED	AWARDED FOR	TIME LIMITS FOR RECOMMENDATIONS OR AWARDS	GRATUITY
Medal of Honor (1917-18) (no longer issued)	Any person who, while in the naval service of the United States shall, in action involving actual combat with the enemy, or in the line of his profession, distinguish himself conspicuously by gallantry and intrepidity at the risk of his life above and beyond the call of duty and without detriment to the mission.	Combat or noncombat	Must be issued within 5 years from date of distinguished act or recommended within 3 years of act, or service.	\$2 per month from date of distinguished act, to enlisted men only.
Navy Cross	Any person who, while serving in any capacity with the Navy, distinguishing himself conspicuously by gallantry and intrepidity at the risk of his life above and beyond the call of duty and without detriment to the mission.	Combat only	Do.	Do.
Distinguished Service Medal	Any person serving with the naval service of the United States who distinguishes himself by extraordinary heroism in connection with military operations against an armed enemy.	Combat or noncombat	Do.	Do.
Legion of Merit	Any person who, while serving in any capacity with the Navy of the United States since 6 Apr. 1917, has distinguished himself by exceptionally meritorious service to the Government in a duty of great responsibility. Personnel of the armed forces of the United States and the Philippines; and personnel of the armed forces of friendly foreign nations who, since 8 Sept. 1939, shall have distinguished themselves by exceptionally meritorious conduct in the performance of outstanding services.	Combat or noncombat	No time limit.	No gratuity provided.
Silver Star Medal	Any person who, while serving in any capacity with the Navy of the United States since 6 Dec. 1941, has distinguished himself conspicuously by gallantry and intrepidity in action, not sufficient to justify the award of Medal of Honor or Navy Cross; also cases of persons previously submitted, recommended for Medal of Honor or Navy Cross or Distinguished Service Medal, and who were turned down, may be reconsidered; all cases to be considered on records now in Navy Department.	Combat or noncombat	Must be issued within 5 years from date of distinguished act or service, or recommended within 3 years, except when awarded in cases previously submitted and turned down for Medal of Honor, DSM, or Navy Cross	\$2 per month from date of distinguished act or service, or recommended within 3 years, except when awarded in cases previously submitted and turned down for Medal of Honor, DSM, or Navy Cross
Distinguished Flying Cross	Any person who, while serving in any capacity with the Air Corps of the Army, National Guard, and Organized Reserves, or with U. S. Navy, Marine Corps or Coast Guard, subsequent to 6 Apr. 1917, has distinguished himself by heroism or extraordinary achievement while participating in aerial flight. Members of military, naval, or air forces of foreign governments, while serving with the United States.	Noncombat only	Must be issued within 3 years from date of distinguished act or service, or recommended within 2 years from date of act or service.	\$2 per month from date of distinguished act or service, or recommended within 3 years, except when awarded in lieu of a letter of commendation previously awarded for heroism.
Navy and Marine Corps Medal	Any person who, while serving in any capacity with the U. S. Navy or Marine Corps, including Reserves, shall have, since 6 Dec. 1941, distinguished himself or herself by heroism not involving actual conflict with an enemy, or to any person to whom the Secretary of the Navy has formerly awarded a letter of commendation for heroism, regardless of date, subject to approval of the Board of Decorations and Medals.	Noncombat only	Must be issued within 5 years from date of distinguished act or service, or recommended within 3 years, except when awarded in lieu of a letter of commendation previously awarded for heroism.	No gratuity for services prior to 6 Dec. 1941; \$2 per month from date of distinguished act, after 7 Dec. 1941, for enlisted men only.
Bronze Star Medal	Any person serving with Army, Navy, Marine Corps or Coast Guard on or after 7 Dec. 1941 who distinguishes himself by heroism or meritorious achievement or service, not involving participation in aerial flight, in connection with military or naval operations against an enemy.	Combat or noncombat	No time limit.	No gratuity authorized.

Air Medal	Any person who, while serving with Army, Navy, Marine Corps or Coast Guard of the United States in any capacity, subsequent to 8 Sept. 1939, distinguishes himself by meritorious achievement while participating in an aerial fight.	Combat or noncombat	No gratuity authorized.
Commendation Ribbon	All personnel of Navy, Marine Corps and Coast Guard who receive an individual letter of commendation signed by SecNav, Cominch, CinCaf or CincLant, or a Fleet Commander or rank of Vice Admiral or above, for an act of heroism or service performed since 6 Dec. 1941 (but ribbon may not be worn for letters received after 11 Jan. 1944 unless text so authorizes, or for any letters from Fleet Commanders prior to 13 Sept. 1944).	Combat or noncombat	No time limit.
Purple Heart	Persons wounded in action against the enemy of the United States while serving with the Navy, Marine Corps, or Coast Guard of the United States or as result of act of such enemy, if wound necessitated treatment by medical officer. Also to next of kin of persons killed in action.	Combat only	No time limit.
Presidential Unit Citation	Officers and men of the Navy and Marine Corps who rendered specially meritorious service, other than in battle, during the War with Spain.	Noncombat only	No time limit.
Specialty Meritorious Medal, War with Spain (no longer issued)	Any ship, aircraft, or naval units, any marine aircraft detachment or higher unit for outstanding performance in action on or after 16 Oct. 1941.	Combat only	No time limit.
NOTE.—A gold star is awarded in lieu of a second award of the same decoration. Each additional award which carries a gratuity shall entitle the recipient to a monthly additional pay at the rate of \$2 per month from the date of the distinguished act or service for which the award is made, and this shall continue throughout his active service, whether continuous or not.			
DISTINGUISHED SERVICE MEDAL			
SILVER STAR MEDAL			
LEGION OF MERIT			
DISTINGUISHED FLYING CROSS			
NAVY CROSS			
MEDAL OF HONOR			
NAVAL & MARINE CORPS MEDAL			
AIR MEDAL			
PURPLE HEART MEDAL			
SPECIALLY MERITORIOUS MEDAL			

Figure 115. Medals.

(1) *Gold Life-Saving Medals* may be awarded persons who, by extreme and heroic daring, have endangered their lives in saving or endeavoring to save lives from the perils of the sea in waters over which the United States has jurisdiction, or upon American vessels.

(2) *Silver Life-Saving Medals* may be awarded in cases not sufficiently distinguished to deserve the gold medal.

COMMEMORATIVE MEDALS. (1) *Dewey Medal* (commemorating the Battle of Manila Bay). Issued to officers and men of the ships of the Asiatic Squadron of the United States under the command of Commodore George Dewey on 1 May 1898. The ships are listed in *Bureau of Naval Personnel Manual*, Art. A-1022. (Act of 3 June 1898.)

(2) *Sampson Medal* (commemorating naval engagements in the West Indies). Issued to officers and men of Navy and Marine Corps who participated in the naval and other engagements in West Indies waters and on the shores of Cuba during the war with Spain, deemed by the Secretary of the Navy to be of sufficient importance to deserve commemoration. (Act of 3 March 1901.)

(3) *NC-4 Medal* (commemorating the first transatlantic flight of the United States naval flying boat in May 1919). Issued to members of the *NC-4* for their extraordinary achievement. (Act of 9 February 1929.)

(4) *Byrd Antarctic Expedition Medal* (1928-30). Issued to officers and men of the expedition for their heroic and undaunted services in connection with the scientific investigations and extraordinary aerial explorations of the Antarctic continent. (Act of 23 May 1930.)

(5) *Second Byrd Antarctic Expedition Medal* (1933-35). Issued to the deserving personnel of that expedition that spent the winter night at Little America or who commanded either one of the expedition ships throughout the expedition, for their heroic and undaunted accomplishments for science, unequaled in the history of polar exploration. (Act of 2 June 1936.)

SERVICE MEDALS. (1) *Civil War Medal*. Issued to officers and enlisted men of the Navy who served in the Navy during the Civil War, between 15 April 1861 and 9 April 1865.

(2) *Expeditionary Medal* (Navy and Marine Corps, initial award 1874). Awarded to officers and enlisted men of Navy and Marine Corps who landed on foreign territory and engaged in operations against armed opposition, or operated under circumstances deemed to merit special recognition and for which service no campaign medal has been awarded. (Authorized expeditions and dates are listed in *Bureau of Naval Personnel Manual*, Art. A-1028.)

For each expedition in excess of one, a bronze star is issued, to be worn on the ribbon. The medal may be awarded to officers and men separated from the service under honorable conditions. Personnel who served in the defense of Wake Island 7 to 22 December 1941 wear a silver "W" on the suspension ribbon or service ribbon bar.

(3) *Spanish Campaign Medal*. Issued to all who were in the naval service between 20 April and 10 December 1898.

(4) *Philippine Campaign Medal*. Issued to officers and men of the Navy who served in Philippine waters and were attached to one of the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1030, between the dates designated.

(5) *China Relief Expedition Medal* (1900-1901). Issued to officers and men of the Navy who served in Chinese waters and were attached to one of the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1031, between the dates designated.

(6) *Cuban Pacification Medal*. Issued to all officers and men of the Navy or who have been in the Navy and who served ashore in Cuba between the dates of 12 September 1906 and 1 April 1909, or who were attached to any one of the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1032, between the dates designated.

(7) *Nicaraguan Campaign Medal* (1912). Issued to officers and men of Navy and Marine Corps who served in Nicaragua or on board any of the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1033, between 29 July and 14 November 1912.

(8) *Mexican Service Medal*. Issued to all officers and men of Navy and Marine Corps who served on shore at Vera Cruz from 21 to 23 April 1914 inclusive, or on board any of the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1034, between the dates designated.

(9) *Haitian Campaign Medal* (1915). Issued to any officer or man of Navy or Marine Corps who served in Haiti during the period from 9 July to 6 December 1915, or any part of such period; also officers and men who were attached to vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1035, par. 1, between the dates designated.

(10) *Dominican Campaign Medal*. Issued to commemorate services performed by Navy and Marine Corps personnel during operations in Santo Domingo from 5 May to 4 December 1916; also the officers and men who were attached to the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1036, between the dates designated.

(11) *Victory Medal* (World War Service Medal). Issued to all persons in the naval service between 6 April 1917 and 11 November 1918, or who entered the naval service on or after 12 November 1918 and prior to 30 March 1920, and served not less than 10 days on shore in northern Russia or Siberia or who were attached to one of the following vessels: *Albany*, *Brooklyn*, *Des Moines*, *Eagle No. 1*, *Eagle No. 2*, *Eagle No. 3*, *New Orleans*, *Sacramento*, *South Dakota* or *Yankton*. For details on service clasps, bronze stars, etc., see page 393 and *Bureau of Naval Personnel Manual*, Art. A-1037.

(12) *Army of Occupation of Germany Medal* (1918-23). Issued to officers, Army nurses, warrant officers, and enlisted men of the armed forces (or to nearest of kin surviving) who served in Germany or Austria-Hungary during the period of occupation at any time from 12 November 1918 to 11 July 1923. Does not include naval personnel aboard vessels in port, unless detached for duty ashore by competent authority.

(13) *Haitian Campaign Medal* (1919-20). Issued to officers and men of Navy and Marine Corps who participated in operations in Haiti from 1 April 1919 to 15 June 1920; also the officers and men attached to the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1035, par. 2, between the dates designated.

(14) *Second Nicaraguan Campaign Medal*. Issued to officers and men of Navy and Marine Corps who served on shore in Nicaragua between 27 August 1926 and 2 January 1933, and to those who were attached to and serving on board the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1039, between the dates designated.

(15) *Yangtze Service Medal*. Issued to officers and men of Navy and Marine Corps who served on shore at Shanghai or in the valley of the Yangtze River in a landing force during the periods between 3 September 1926 and 21 October 1927, and from 1 March 1930 to 31 December 1932; also to those attached to the vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1040, between the dates designated.

(16) *China Service Medal*. Issued to officers and men of Navy and Marine Corps who participated in operations in China from 7 July 1937 to 7 September 1939, and to those serving on board vessels listed in *Bureau of Naval Personnel Manual*, Art. A-1041.

(17) *American Defense Service Medal*. Issued to all persons in the naval service who served on active duty between 8 September 1939 and 7 December 1941, both dates inclusive. For further details as to eligibility, and wearing of clasp, star and bronze "A," see page 393, and *Bureau of Naval Personnel Manual*, Art. A-1042.

(18) *Area Campaign Medals* (American, European-African-Middle Eastern, Asiatic-Pacific). Awarded to members of the land and naval forces of the United States (including Women's Reserve) who, between 7 December 1941, inclusive, and a date six months after termination of the war, shall have served outside the continental limits of the United States in the area designated for a period of 30 days (must be consecutive if applied to temporary additional duty). See map and details as to eligibility, boundaries, etc., on page 406; also *Bureau of Naval Personnel Manual*, Art. A-1043.

MISCELLANEOUS MEDALS. (1) *Good-Conduct Medals* and pins are issued by the Bureau of Naval Personnel; medal for first award, pin for each subsequent award. For details of provisions, eligibility, etc., see page 395 and *Bureau of Naval Personnel Manual*, Art. A-1046.

(2) *Bailey Medal*. Instituted by the late Rear Admiral Theodorus Bailey for the purpose of inciting apprentices of the Navy to greater effort in acquiring proficiency in their duties.

(3) *Naval Reserve Medal*. May be awarded by the Chief of Naval Personnel to any officer or enlisted man of the Naval Reserve who has completed 10 years' honorable service in the Naval Reserve, Naval Reserve Force, National Naval Volunteers, or federally recognized Naval Militia in an active-duty or inactive-duty status (bronze star for each additional 10 years). In time of war or national

emergency, members of Naval Reserve do not become eligible until they report for active duty. (*Bureau of Naval Personnel Manual*, Art. A-1049.)

(4) *Medal for Merit.* May be awarded by the President to such civilians of the United Nations and other friendly foreign nations who have, since 8 September 1939, distinguished themselves by exceptionally meritorious conduct in performing outstanding services in furtherance of the war effort. (Act of 20 July 1942.)

SMALL-ARMS MEDALS, BADGES. (1) *Navy Distinguished Marksman Gold Badge.* Awarded to individuals who have won three medals in either or both of the national rifle matches, or who won two medals in the national rifle matches and a place medal in either force or fleet rifle match.

(2) *Navy Distinguished Pistol Shot Gold Badge.* Awarded for similar accomplishments as above in equivalent pistol matches.

(3) *Navy Expert Rifleman Medal.* Awarded for attaining qualifications as expert with either the rifle or carbine in prescribed courses.

(4) *Navy Expert Pistol Shot Medal.* Awarded for attaining qualification as expert with .45-caliber pistol or .38-caliber revolver in prescribed courses.

(Note: Detailed regulations for the above four awards will be found in *Landing Force Manual*, ch. 19.)

MARINE CORPS AWARDS.¹ (1) *U. S. Marine Corps Brevet Medal.* Awarded to the holder of a commission issued by the President and confirmed by the Senate for distinguished service in the presence of an enemy, in the Mexican War, Civil War, Spanish-American War, Philippine Insurrection and the Boxer hostilities of 1900.

(2) *Marine Corps Good-Conduct Medal.* May be awarded to a man discharged upon expiration of first enlistment with final average of 4.6 or over in obedience and sobriety, and 4.0 or over in military efficiency, neatness and military bearing and intelligence. For subsequent enlistments, marks must be 4.8 and 4.0, respectively. (Marine Corps enlisted grades are based on 5.0 top rather than on 4.0 as used in the Navy.)

(3) *Marine Corps Reserve Service Medal.* To be eligible, one must attend with an organized unit of reserve a 14-day annual field-training period each year for four consecutive years; must attend at least 38 drills yearly for four consecutive years, and in the case of officers, must have received no unsatisfactory fitness reports, or, in the case of enlisted men, must be awarded a final average service record marking of 4.5 or over upon discharge.

COAST GUARD AWARDS.¹ The three medals worn only by Coast Guard personnel—the good-conduct, rifle shot, and pistol shot medals—are awarded on exactly the same basis to Coast Guard personnel as their equivalent medals are awarded to personnel of the United States Navy and Naval Reserve.

Area Campaign Medals

These are awarded to those in the U. S. forces who, between 7 Dec. 1941 and a

¹ In addition to Navy awards.

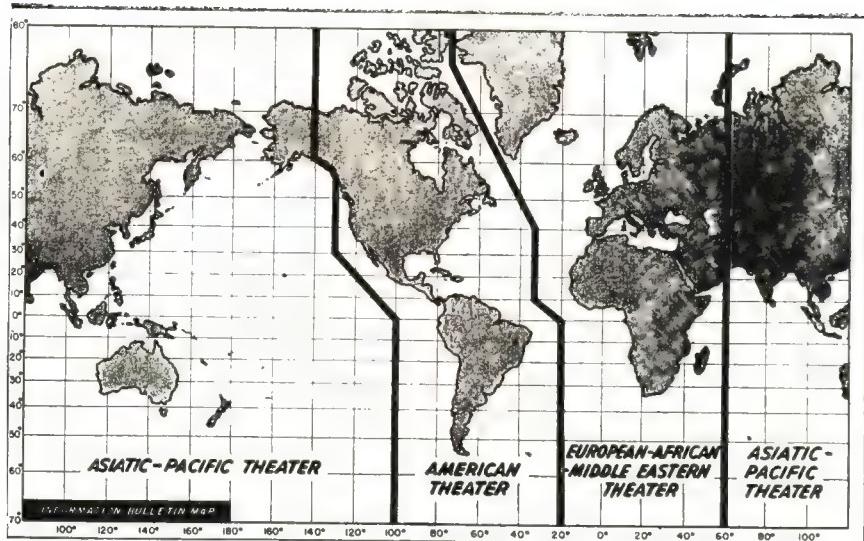


Figure 116. Map showing campaign medal areas.

date six months after the end of the war, inclusive, serve outside the continental limits of the United States for 30 days (must be consecutive if on temporary or temporary additional duty; see detailed rules and explanations below).

The three areas for which area campaign medals are awarded, and their geographical definitions (see map above), are as follows:

(1) *American Area.* East boundary: From the North Pole, south along the 75th meridian west longitude to the 77th parallel north latitude, thence southeast through Davis Strait to the intersection of the 40th parallel north latitude and the 35th meridian west longitude, thence south along that meridian to the 10th parallel north latitude, thence southeast to the intersection of the equator and the 20th meridian west longitude, thence along the 20th meridian west longitude to the South Pole.

West boundary: From the North Pole, south along the 141st meridian west longitude to the east boundary of Alaska, thence south and southeast along the Alaskan boundary to the Pacific Ocean, then south along the 130th meridian to its intersection with the 30th parallel north latitude, thence southeast to the intersection of the equator and the 100th meridian west longitude, thence south along the 100th meridian west longitude to the South Pole.

(2) *European-African-Middle Eastern Area.* East boundary: From the North Pole, south along the 60th meridian east longitude to its intersection with the eastern border of Iran, thence south along that border to the Gulf of Oman and the intersection of the 60th meridian east longitude, thence south along the 60th meridian east longitude to the South Pole.

West boundary: Coincident with the east boundary of the American area.

(3) *Asiatic-Pacific Area.* East boundary: Coincident with the west boundary of the American area.

West boundary: Coincident with the east boundary of the European-African-Middle Eastern area.

Area campaign medals are authorized under any one of the following conditions:

1. Sea duty. Attached to and serving on board a Navy or Coast Guard vessel, or any other to which regularly assigned, in the designated area, or as a member of an organization being transported for duty in an area aboard such vessels, for a period of 30 days. This service need not be continuous nor in the same vessel.

2. Shore duty. Attached to and regularly serving on shore in a designated area for a period of 30 days. Such service need not be continuous nor in the same locality, but must be within the designated area.

3. Any combination of (1) and (2) that will aggregate 30 days in a designated area.

4. Patrols. Service in patrol vessels or aircraft operating in or above ocean waters, provided the individual has been attached to such units for a period of 30 days and has performed regularly required patrols. This provision is applicable even though the base from which such vessels or aircraft operate is within United States continental limits.

5. Combat. In all cases where a vessel, aircraft, or other unit engages in combat with, attacks, or is attacked by enemy forces, all personnel serving in that vessel, aircraft, or other unit immediately become eligible for the appropriate area medal without reference to the 30-day provision. However, the certain presence of enemy forces, especially in the case of enemy submarines, must be established.

6. Hazardous duty. Engaging in any service in a designated area which, in the opinion of the appropriate fleet or frontier commander or Commandant, United States Marine Corps, is equally as hazardous as combat duty renders the individuals concerned immediately eligible for the appropriate area medal without reference to any time limitation. This applies to such operations as mine recovery and disposal, bomb disposal, or equally hazardous operations.

7. Passengers. No individual en route in a purely passenger status becomes eligible for any area medal unless he or the means of conveyance is attacked by or engages in combat with the enemy, in which case he immediately becomes eligible. Patients in a hospital ship are considered as attached to the ship rather than passengers.

8. Temporary or temporary additional duty. No person on such duty is eligible unless it includes a period of at least 30 days consecutive duty in a designated area or unless he engages in combat with or is subjected to attack by enemy forces.

9. In any case, service which entitled an individual to a clasp or star as defined in existing orders also entitles him to the ribbon of the area in which the service is rendered.

"Outside continental limits of the United States" means more than three

miles offshore. Coastal duty inside that area would not be considered outside continental limits. For the purposes of these medals, Alaska is considered as outside United States continental limits.

Pending issue of the medals (after the war), service ribbons are authorized to be worn in lieu of them. For participation in certain operations or engagements, a bronze star is worn. A silver star is worn on the ribbon in lieu of each five bronze stars.

A complete list of the only operations and engagements for which stars have so far been authorized appeared in the *Bureau of Naval Personnel Information Bulletin*, October 1944, p. 66.

Fuller information on decorations, medals and badges may be found in *Bureau of Naval Personnel Manual*, Chapter 1, Part A.

B. OFFICERS' OFFICIAL RECORDS

Importance of officers' official records. Any matter that is rightfully placed in an officer's official record can never be removed except by special authorization of Congress. Each day of his service career, the officer is accumulating material which, when properly entered (in the records), is there to stay. These records are scanned almost always when any change affecting him is under consideration, such as assignment to duty, special details, examination for promotion, in the event of a general court-martial, disciplinary action by the Bureau, and—of particular importance—in the selection for promotion to a higher rank. In other words, the officer in furnishing the material for his record is daily adding to the evidence that is the basis of his personal and professional reputation in the Navy.

The importance of these records is brought to the particular attention of junior officers, and especially those who have but recently been commissioned. Upon graduation from an officers' training school, these officers are, in a day, removed from the routine of a school that exacts a strict attention to duty from them and exercises a guiding influence in all their affairs. Under these conditions, and frequently accentuated by the youth of the individuals, it sometimes happens that junior officers, without any intention of being lax in the discharge of their responsibilities or in their conduct, and without a full realization of the consequences, either do not put forth their best efforts or fail in the strict observance of the naval code. A mass of unfavorable matter, even though the separate entries are not in themselves of a grave nature, will, in the aggregate, naturally build up a prejudice against an officer which, in effect, might be as detrimental to him in the years to come as a conviction by a general court-martial.

Fitness reports. The fitness report is discussed fully in Appendix C. Briefly, Regular Navy officers' fitness report jackets include fitness reports, letters of reprimand or censor, and answers to unsatisfactory or unfavorable remarks on fitness reports. All letters accompanying fitness reports for the periods included in the over-all period covered by the report for officers of the Regular

Navy are filed in the Selection Board jacket. Commendations and participation-in-action letters, etc., are all part of the Selection Board jacket for officers of the Regular Navy.

Naval Reserve officers' fitness report jackets include fitness reports, answers to unsatisfactory and unfavorable remarks on fitness reports, all letters of performance, commendation, reprimand, censor, etc.

All wartime fitness reports for officers of the Regular Navy and of the Naval Reserve are filed in the Bureau of Naval Personnel.

Correspondence file. This record contains all correspondence of a general and nonconfidential nature, such as requests, copies of orders, reports of leave of absence, compliance with orders, and miscellaneous correspondence. Correspondence files for all officers are kept in the Bureau of Naval Personnel.

Confidential file. This record contains correspondence from any source of a confidential nature pertaining to the officer. It is available for reference only on the authority of the Chief of Naval Personnel in each case. In the majority of cases there is no confidential matter pertaining to the officer, and consequently no confidential file. Matter of an unfavorable nature is first referred to the officer concerned before filing. Confidential files are stored in the Bureau of Naval Personnel.

Examinations. In times of peace the written professional examinations for promotion in rank of officers of the Regular Navy are retained in the examination file. Examination papers are available for the officer's inspection at the Office of the Judge Advocate General.

Records of proceedings: courts-martial, inquiries, investigations, etc. These records are retained in the Office of the Judge Advocate General and may be inspected by officers concerned.

Report of beneficiaries. This slip lists all beneficiaries of the officer. (The same form is used for enlisted personnel.) Also included in the new form is the report on dependents and the report of next of kin. It is kept in the officers' correspondence jackets for Reserves and in the Performance Division (Register Section) for Regulars.

Special Selection Board file. (For Regular Navy officers only.) Included in this file are letters from force commanders or from naval officials, other than the reporting senior of the officer concerned, regarding special services which are not incorporated in reports of fitness. Also included are letters from officials (outside the Navy) regarding performance of important duty not strictly naval in character, and written communications from the officers concerned inviting the attention of the Selection Board to matters of record. (For additional items in the Special Selection Board file, see previous discussion of fitness reports.)

Access to records. Access to the records of officers is given only to the officer personally, his attorney on the order of a proper court, to the officers of the Navy Department for use in the transaction of official business, and to the representative of the officer upon presentation by such person of a written authorization from the officer concerned.

With the exception of his confidential file, any officer can obtain access to any of his records by applying to the section in which it is filed in the Navy Department. Only the Chief of Naval Personnel (or Acting Chief of Naval Personnel) has authority to grant access to an officer's confidential file. In case an officer desires that access to his confidential file be given to his representative, the written authorization must state that fact.

When an officer is being considered for selection, his entire record is available to the Selection Board for use in its deliberation.

Anonymous communications are never made a part of an officer's records.

Need for keeping a personal file. Officers should make it a point to keep a file of their personal records. It should be started with the first correspondence relating to the officer's naval career. Not infrequently he will find this file of inestimable value in establishing important facts and figures at a later date.

C. OFFICERS' FITNESS REPORTS

General. The officer's fitness report (NavPers 310A, Rev. 8-44) serves as a report of fitness for all officers both afloat and on shore. All fitness reports should contain *full* name and file number of officer reported on. Initials should not be used. A typewriter should be used, if possible, in filling out Sections 1 through 6. The remarks and comments entered on the fitness report should cover only the period of time stated in the report.

Besides a page of instructions, with a work sheet on the back, the form has three pages. Page 1 is the fitness report itself. This is kept on file in the Bureau of Naval Personnel in the officer's fitness-report jacket. Pages 2 and 3 repeat only the upper part of Page 1 and are arranged so as to be filled in as carbon copies of the original. Page 2, duplicating the first six sections of Page 1, is submitted with the original and serves to keep up to date a separate record in the Bureau of Naval Personnel of the officer's previous experience and qualifications for various types of duty. Page 3, the same as Page 2, except that it omits the blanks for "appraisal for detail purposes," is placed in the officer's qualification-record jacket. Each officer below the rank of captain carries such a jacket with him on any permanent change of duty station as a guide to his new Commanding Officer or personnel officer in assigning him properly.

Preparation of fitness reports. The preparation of fitness reports is one of the most important and responsible duties of an officer and should not be entered upon lightly. In the present war, many officers of junior rank have had this grave responsibility. Careful consideration should be given to each officer by the reporting officer and by officers who submit rough reports to a Commanding Officer for consideration.

Fitness reports are submitted in accordance with Section 5 of Chapter 2, *Navy Regulations* (1920), *Bureau of Naval Personnel Manual*, Article C-1006, and the current Bureau of Naval Personnel Circular Letter on the subject of fitness reports. (Also pertinent is AlNav 222 of 14 Dec. 1944.)

Reporting seniors should submit reports promptly. Failure to do so is prejudicial to the rights of the officer reported on and is not to be tolerated by the Bureau of Naval Personnel.

The Commanding Officer of a ship should require the executive officer to report to him on the fitness of all heads of departments and other officers attached to the ship, and should, in addition, require the heads of ship departments to report to him on the fitness of officers who have performed duty under their orders. These reports rendered to the Commanding Officer by the executive officer and heads of departments are for his use in making his report on the fitness of all officers under his command and are not forwarded to the Navy Department unless, in unusual cases, the Commanding Officer deems such procedure advisable, in which event he should state the reason therefor.

The first five sections of the officer's fitness report are filled out by the officer reported on, the remainder by the reporting officer. It should be noted that in Section 7 and subsequent sections, the reporting officer is asked to compare each officer reported on with *all others* of the same rank, and approximately the same length of service in that rank, whose professional abilities are known to him personally. This means, of course, that the officer being reported on is not to be compared *only* with the others of his rank at the particular time under the reporting officer's command. It is for this reason that it is important to indicate in Section 9 how many officers are included in the group the reporting officer is using for comparison. This method of evaluating officers is helpful to Selection Boards or Panels who must, in effect, in deciding on promotions of officers, compare an officer with others of the same rank rather than with more arbitrary standards. (The older method was to measure officers against the 4.0 arbitrary standard of perfection.)

In making the comparison referred to above, it should be borne in mind that the group of officers whose professional abilities are known to the reporting officer personally will tend to fall into a normal distribution when graded on any quality, trait, characteristic or other factor. There will normally be a small number at the lower end, a larger group in the middle, and a small group at the top. With this curve in mind, the reporting officer compares the officer he is reporting on with the entire group and marks him on each factor in Section 7 as falling in one of the five brackets—the lower 10, the next 20, the middle 40, the next 20, or the top 10. The reporting officer should not hesitate to mark "not observed" on any factor which seems not applicable to the duty the officer performed or in situations where the reporting officer's observation has been too limited to warrant judgment.

Only adverse entries in Sections 8, 9, 11, and 12 are to be considered an unsatisfactory report. Therefore only adverse entries in these sections need be referred to the officer reported on for statement. A record of all punishments inflicted upon the officer, with the date and nature of offense and the kind and degree of punishment, should be set forth under Section 12 of the fitness report. Whenever any portion of the report made by the reporting senior is unsatis-

OFFICER'S FITNESS REPORT

NAVPERNS-3/6A (REV. 3-66)

PLEASE TYPE THIS FORM
If no typewriter is available use ink but be sure all spaces are legible.

84

1. NAME (last) (first) (middle)			RANK AND CLASSIFICATION	FILE NO.
SHIP OR STATION			DATE FROM	PERIOD OF REPORT DATE TO
DATE OF ASSIGNMENT TO PRESENT DUTY		OCCASION FOR REPORT <input type="checkbox"/> DETACHMENT OF OFFICER REPORTED ON <input type="checkbox"/> DETACHMENT OF REPORTING SENIOR <input type="checkbox"/> REGULAR SEMI-ANNUAL <input type="checkbox"/> QUARTERLY <input type="checkbox"/> SPECIAL		
2. DESCRIPTION OF DUTIES SINCE LAST FITNESS REPORT (List most recent first and describe accurately)				

3. IF COURSES OF INSTRUCTION WERE COMPLETED DURING PERIOD OF THIS REPORT, LIST TITLE OF COURSE, LOCATION OF SCHOOL, LENGTH OF COURSE AND DATE COMPLETED.

4. IF AVIATOR, INDICATE NO. OF FLIGHT HOURS TYPE OF AIRCRAFT

E. MY PREFERENCE FOR EACH TYPE AIRCRAFT **NO. OF HOURS**

**8. SECTIONS 6 THROUGH 12 TO BE
ERASED** **END OF DOTT** **LOCATION**

FILLED IN BY REPORTING OFFICER

IS THIS OFFICER QUALIFIED TO PERFORM ALL HIS PRESENT DUTIES?	<input type="checkbox"/> YES <input type="checkbox"/> NO	INDICATE MORE RESPONSIBLE DUTIES FOR WHICH HE IS IN TRAINING. (If none, so state)	DATE OF EXPECTED QUALIFICATION
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Comment on special or outstanding qualifications as well as any physical defects, which should be considered in determining the kinds of duty to which he should be detailed. Only comments on quali-

Comment or Serial by establishing qualifications at time of his/her first entry which should be considered in determining the kinds of duty to which he/she should be assigned. Only comments or evaluations (highlighted in red) concerning fitness for promotion should be entered in section 16. ONLY.

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FOR WHAT DUTIES IS HE RECOMMENDED?

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7. FOR EACH FACTOR OBSERVED CHECK THE APPROPRIATE BOX TO INDICATE HOW THE OFFICER COMPARES WITH ALL OTHERS OF THE SAME RANK WHOSE PROFESSIONAL ABILITIES ARE KNOWN TO YOU PERSONALLY. DO NOT LIMIT THIS COMPARISON ONLY TO THE OTHERS NOW UNDER YOUR COMMAND. DO NOT HESITATE TO MARK "NOT OBSERVED" IF YOU HAVE NO INFORMATION CONCERNING THE FACTOR. THIS SECTION WILL BE CONSIDERED AN UNSATISFACTORY REPORT WHICH MUST BE REFERRED TO THE OFFICER FOR EXPLANATION. ONLY EXTRAS IDENTIFIED IN SECTION 11 WILL BE CONSIDERED.

8. INDICATE YOUR ATTITUDE TOWARD
HAVING THIS OFFICER UNDER YOUR
COMMAND, WOULD YOU: (Check one)

DEFINITELY NOT WANT HIM? (UNSATISFACTORY)	PREFER NOT TO HAVE HIM? (UNSATISFACTORY)	<input type="checkbox"/> BE SATISFIED TO HAVE HIM?	<input type="checkbox"/> BE PLEASED TO HAVE HIM?	<input type="checkbox"/> PARTICULARLY DESIRE HIM?
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38. CONSIDERING ALL OFFICERS OF THE COMPANY, HOW MANY PERSONS ARE THERE IN WHICH THE ABILITIES ARE KNOWN TO YOU? HOW MANY PERSONS ARE KNOWN TO YOU AS HAVING THE FOLLOWING FACTORS?

18. COMMENT IN SECTION 12 AND GIVE REFERENCE HERE TO ANY COMMENDABLE OR ADVERSE REPORTS THAT HAVE BEEN MADE ON THE OFFICER DURING THIS PERIOD.

11. HAVE YOU ANY ADVERSE COMMENTS TO MAKE REGARDING THIS OFFICER'S QUALITY OR PERFORMANCE? YES NO If yes, explain in Section 12.

12. HAVE YOU FOUND ANY MORAL OR MORAL WEAKNESS WHICH ADVERSELY AFFECTS HIS EFFICIENCY? YES NO

13. Give, in this space, a clear, concise appraisal of the officer reported on and his performance of duty, including any words of special mention. Include recommendations as to promotion. Any statements of unsatisfactory performance, ability, character, or conduct must be referred to the officer for statement. Statements of a constructive nature which refer to minor imperfections or lack of qualifications should be included.

He is slow in getting started but is now making good progress" or "This officer is well qualified in his present duties but has

REVIEW ARTICLE | **REVIEW ARTICLE** | **REVIEW ARTICLE** | **REVIEW ARTICLE**

—
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...and the world was created.

HAVE YOU READ
THE ATTACHED
INSTRUCTIONS

factory, the reason should be clearly stated in Section 12 and the entire report referred to the officer reported on for his statement with regard to the unsatisfactory portion. The report and signed statement should be returned without delay to the reporting senior. The reporting senior forwards the statement and fitness report to the Bureau of Naval Personnel by indorsement. If the officer reported upon does not desire to make a statement, he should so state in writing. Reporting seniors are not required to give answers to queries which are beyond their personal knowledge.

Reporting seniors should maintain a separate mail log regarding fitness reports as well as a file of fitness-report work sheets.

Before forwarding the report to the Bureau, carefully insure that:

- a. Every paragraph is complete in detail (*full* names, dates and file numbers are emphasized).
- b. Both the reporting senior and subject officer have signed the report in ink.
- c. Reporting senior include his file number with his name, rank, and official status.
- d. If report of attachments is *unsatisfactory*, a *signed* statement from officer concerned covering *all* such matter is appended.
- e. All erasures or deletions have been initialed by the reporting senior.

While the reporting officer is required by *Navy Regulations* to refer only unsatisfactory or unfavorable reports to the officer concerned, it is the opinion of the Bureau of Naval Personnel that fitness reports are of greatest value to officers of the Navy if the reporting officer when possible discusses them with the officer reported on, as a matter of general practice.

Unsatisfactory and unfavorable reports. A statement on a fitness report that performance of duty is clearly unsatisfactory constitutes an *unsatisfactory* report. A statement of minor deficiencies either in character or performance of duties constitutes an *unfavorable* report. An unsatisfactory report must have the statement of the officer reported attached; an unfavorable report requires that the officer reported on has been informed of his deficiencies either verbally or in writing. It should be noted that the instructions in Section 12 clearly state that remarks of a constructive nature which refer to minor imperfections or lack of qualifications do not constitute an unsatisfactory report. Examples of such statements are:

"This officer was a little slow in getting started but is now making good progress."

"This officer is well qualified in his present duties but has had no experience at sea."

"This officer's most serious fault is lack of service experience, which he is always willing and eager to remedy by seeking information and advice."

Each reporting senior, when referring an unsatisfactory fitness report to the officer reported on, should specifically invite that officer's attention to *Navy Regulations* (1920), article 198 (which appears in Chapter 16, section 16D1 of this volume).

When submitted. The fitness report is to be submitted semi-annually for all officers and in all cases of permanent detachment of either the officer or reporting senior. (Reports are submitted quarterly on captains and commanders who command units afloat, individual ships, or operating commands.) Special reports are submitted only at the following times:

1. When directed by higher authority.
2. When officer is recommended for trial by general court martial.
3. Upon receipt of orders for officer to Bureau of Naval Personnel for disciplinary hearing.
4. When requesting detachment of officer (attach to request).
5. Upon recommendation that officer be disenrolled.

How forwarded. Where there are no attachments classified higher than *restricted*, fitness reports should be forwarded in double envelopes, but not marked confidential. The outer envelope should be addressed to the Bureau of Naval Personnel (Attention: Director, Officer Performance Division) and the inner envelope marked "Fitness Report, Private (Official) Communication." This will eliminate forwarding by registered mail and other delays. Letters of transmittal are neither required nor desired. Where there are attachments classified higher than *restricted*, the report should be transmitted in the same manner as material of the classification of the attachment highest classified. Do not exact classified decodes.

In view of comparatively open classification of officers' reports of fitness, reporting seniors of the Navy, Marine Corps, and Coast Guard, must be especially careful not to include any information which could be of possible value to an enemy. Entries, comments, or remarks which, if reports were considered singly or as a group, would disclose information regarding composition, location, or mission of a unit, nature and condition of equipment, armament, and the like, should be scrupulously avoided. When necessary or desirable to include comments in which classified information is directly pertinent, such comments will be forwarded by separate classified letter.

All reports of fitness should be considered as private (official) communications between the Chief of Naval Personnel (or the Commandant of the Marine Corps as the case may be), the reporting senior, and the officer reported on. In the event of their being referred to an officer for comment or other purpose, they should be sent privately (officially) to such officer and should be similarly returned direct, unless they call into question the action of any higher authority, in which case they should be forwarded in the same private (official) manner via such higher authority.

Special reports in letter form. Special reports, in letter form, are made at any time that occasion may arise of:

- a. Distinguished conduct in battle.
- b. Conspicuous acts of valor or devotion in line of duty.
- c. Extraordinary courage, ability, or resourcefulness in time of peril or great responsibility.

(These provisions should be strictly construed and not extended to cover acts of duty that, although out of the ordinary course, are yet not uncommon in seafaring or military life. The regular reports of fitness should comprise as complete an estimate as practicable of an officer's performance of duty, special and ordinary, during the period in question.)

d. Serious misconduct or marked inefficiency. (A copy is to be referred to the officer concerned for such statement as he may choose to make in reply.)

e. Temporary detachment or absence of officers from regular stations, on duty out of or additional to regular course. (Such officers are reported on by the senior under whom the special or additional duty is performed. The report, in letter form, is sent to the officer's regular reporting senior for his information and is appended to the next regular report of fitness. This paragraph does not apply to duty on courts, boards, surveys, etc.)

What the fitness report means to officers. The fitness of an officer for the service, with respect to promotion and assignment for duty, is determined by his record. Reports on fitness and special reports are decisive on the service career of the individual officer, and have important influence on the efficiency of the entire Navy.

The fitness report places major emphasis upon personal attributes, rather than upon professional attainments. These reports should constitute an accurate evaluation of the officer's merits and demerits. Basically they represent the well-considered opinion of one senior as to the performance of duty during a specific period of one of his subordinates. It is a most unfortunate sign if the same weaknesses are commented upon in the report time after time. After an officer investigates his fitness report he should take immediate steps to correct his deficiencies. An officer should avoid the feeling of resentment against the reporting officer if he has not been reported upon as favorably as he feels he deserves. It is well to learn about oneself by looking through the reporting officer's eyes.

It is wise for an officer not to worry about his fitness report, but to do each job given him to the best of his ability. -Under such circumstances the fitness reports usually take care of themselves.

With the years, a collection of fitness reports accumulates in the officer's file in the Bureau of Naval Personnel. They are made by a number of senior officers who are assumed to be impersonal in their evaluation and have the best interests of the Navy at heart. Taken together, these reports give a running record of an officer's performance of duty under varying conditions and are of inestimable value for the Selection Board when convened to consider officers for promotion. The Detail Officer in the Bureau also finds them of great value in assigning the officer to duty which he is best equipped to perform.

D. CLASSIFICATION AND BILLET SELECTIONS OF RESERVE OFFICER PERSONNEL

The Navy maintains an extensive system of personnel processing and records in order to insure that the duty assignments of officers relate, insofar as condi-

tions permit, to their educational, civilian, and naval backgrounds. One basic control used to further this objective is the assignment of a classification symbol to each reserve officer.

Officer Classification Symbol. This plan divides officers into two basic groupings: (1) General Service officers (limited and unlimited duty); (2) Special Service officers (limited and unlimited duty). Both line and staff corps personnel are included in each basic classification.

General Service officers are those who are eligible for sea duty and for rotation between sea and shore. They must meet all standards prescribed by the Bureau of Naval Personnel and their medical records must show that they are physically qualified for sea duty. General Service officers who are qualified to perform all duties of their rank within their classification at sea are classified as Unlimited General Service. A common symbol to express this is the letter (D), or when an officer is fully qualified for engineering as well as deck duties, (DE). Those not so qualified are classified as Limited General Service. Common symbols to express this are (D)L or (E)L.

Special Service officers are those who are not physically qualified for sea duty; whose special training and service can be used to best advantage ashore; or who are disqualified for sea duty due to incompatibility of rank, age, and previous sea experience. Special Service officers who are qualified for assignment to any general administrative billet ashore either within the continental limits or at an advance base are classified as Unlimited Special Service and carry the symbol (S). Those who are not so qualified are classified as Limited Special Service. Officers in this category whose prime usefulness is limited to the work performed by a certain bureau of the Navy are classified with the letter (S) plus the bureau cognizance letter, e. g., S(A). Officers classified for Limited Special Service who are technical specialists in a single aspect of a bureau's operations also carry a numeral, e.g., S(A2).

Whenever, in the opinion of the Commanding Officer, an officer on sea duty who is classified Limited General Service qualifies himself for satisfactory performance of all duties of his rank within his classification, the (L) designator for *limited* may be dropped. The change becomes official when notice of it is received by the Bureau of Naval Personnel. Any naval officer who believes his classification symbol to be inaccurate or improper may apply for a review of his qualifications by submitting the argument in support of a different symbol to the Bureau of Naval Personnel through the chain of command.

Coding of Officer Qualifications. A second basic control designed to insure effective utilization of officer skills is the analysis and recording of important qualifications of naval officers and the use of such records in locating officers for specific billets.

Information on each officer's qualifications is obtained by having each officer of and below the rank of commander, each warrant officer, and each prospective officer in training submit an Officer Qualification Questionnaire, NavPers 309, to the Bureau of Naval Personnel. These qualifications—foreign languages,

foreign travel, education, civilian occupational experience, and naval duties—are analyzed by trained officers, transposed into numeral codes, and processed onto IBM punched cards. The cards and questionnaires for every officer, placed on file, become an inventory of pertinent information which can be tapped whenever it is desired to select an officer for a specific billet. A sorting machine makes possible the rapid identification of officers who possess the exact qualifications which any given billet requires. In addition, each time an officer receives a set of permanent duty orders, the code symbol which summarizes his qualifications appears on the orders. This symbol can be interpreted by any ship or shore station by referring to the Code for Classifying Naval Officer's Qualifications, NavPers 15,006.

Most of the major commands (naval districts, fleets, fleet service forces, and air training commands) have a specially trained classification control officer attached to the personnel office. The classification control officer is equipped with Qualifications Questionnaires and punched cards containing coded records of the qualifications of the officers on duty within his command.

Use of the Billet Interview. A third basic program used to promote effective use of naval officers is the program of officer billet selection. Trained interviewing officers function in the field—at primary naval training schools, at pre-commissioning and operational training centers, or at advance base pools—to test and interview officers for the purpose of recommending their further assignment to a school or to a ship or shore billet. In this manner, the Bureau of Naval Personnel dispatches representatives in order to meet tens of thousands of its junior officers face to face.

The interviewing officers are equipped with a Manual of Selection Requirements, NavPers 16407, which includes the qualifications and selection criteria for scores of sea and shore billets. They distribute information booklets about types of naval officer duty, Naval Billets for Junior Officers, NavPers 15097. They give billet lectures which describe the duty opportunities included in current quotas. They study each officer's background, administer general and special Navy tests, and interview each officer available for assignment. Their conclusions as to the appropriate next duty for the officer are forwarded to the Bureau of Naval Personnel on a Duty Recommendation Form, NavPers 2100.

To protect officers from undergoing repeated testing, the interviewing officer prepares a Training School Report, NavPers 318, which serves as an official record of naval course grades and test scores attained. This accompanies the officer to all other training schools to which he may be ordered.

Officer Qualifications Record Jacket. This whole program of officer classification and billet selection is incorporated in the Officer's Qualification Record Jacket, NavPers 305. This jacket serves as a permanent record of the personnel processing which has taken place. It includes a copy of the Officer's Qualifications Questionnaire and all Training School Reports. It must be carried by the Officer from station to station, or ship to ship, along with his health record and pay account. The record jacket is kept up-to-date by including within it the

tear-off section of each fitness report (page 4) which covers the duties to which the officer has been assigned since the previous fitness report was filed.

Officer Distribution Division. All of the activities described are under the cognizance of the Officer Distribution Division, Bureau of Naval Personnel. This division includes the detail desks which write orders controlling the destinies of tens of thousands of naval officers. One huge section is called the Shore Establishments Section, and has responsibility for detailing officers to the thousands of types of duty carried on at shore stations within and without the continental limits. The sea desks are organized in terms of the ship types, e.g., large ships, large auxiliaries, submarine, amphibious, destroyer, etc.

The effort to obtain maximum use of officer skills has made for an efficient, hard-hitting Navy, as thousands of officers are continually fitted into billets with a minimum of preparation because their civilian and naval experiences closely parallel the requirements of the duty to which they are ordered.

E. ENLISTED SERVICE RECORD

For every person enlisting in the Navy a service record is started immediately. This record accompanies the enlistee to all duty stations and is kept by his Commanding Officer.

When the enlistment is completed, the service record is closed out and forwarded to the Bureau of Naval Personnel.

To keep a duplicate record of service the Bureau of Naval Personnel maintains a *jacket* for each enlistee. The shipping articles and certain duplicate pages of the service record, submitted to the Bureau from time to time, are kept in this jacket. From it the Bureau is able to maintain a duplicate service record should the original be lost. This has been necessary on a number of occasions during the present war.

A new service record is opened for each enlistment. For men reenlisting in continuous service, a continuous service certificate is issued by the Bureau. This includes a record of all duty stations; ratings held; marks in conduct and proficiency; commendatory action; marks, in the case of punishment; and certain matters of enlistment, awards received, etc. The Bureau enters all prior service in issuing the certificate and it is kept thereafter as a part of the service record. It is, however, considered the property of the man and is delivered to him upon his separation from the service or release to inactive duty.

Every officer should be familiar with the forms involved and with all information required and action taken. The five most important facts with which an officer need be concerned are as follows: (1) that a record, based on the quarterly marks card, is kept on a man's conduct and proficiency; (2) that certain information is entered in the record when a man is transferred to another ship or station; (3) that all details of disciplinary or commendatory action are recorded; (4) that any completed training courses or successfully passed examinations for advancement are entered; (5) that all orders to disbursing officers involving a change in pay status are entered.

The first document incident to an enlistment is the shipping articles. This item is sent to the Bureau of Naval Personnel and an abstract of it is retained for the man in his service record on pages 1 and 2. The man's full name, service number, and branch of service (Regular Navy or Naval Reserve, with Class), amount of previous service, if any, and continuous service certificate number, if any, are given on the face of the record. The remainder of the record is made up of a number of pages containing information as follows:

Pages 1 and 2 contain personal data and an abstract of the shipping articles. Two copies are furnished the disbursing officer as the *Order to Enter Account*.

Pages 3 and 4 contain identification records and a description list, including fingerprints. These are filled out upon enlistment and reenlistment. (No copy is sent to the Bureau of Naval Personnel.)

The record of advancements in ratings and of completion of practical factors for advancement in rating is entered, in original only, on pages 4-c and 4-d of the service record of each man in the naval service.

Pages 5 and 6 contain data regarding absence from duty—page 5, authorized leave and page 6, unauthorized absence from duty. They are filled out as occurring. (No copy is sent to the Bureau.)

Pages 7 and 8 are the beneficiary slip, giving the man's full name, service number, present duty station, and the name and address of his beneficiary or beneficiaries. Article D-4021 (1)(d), *Bureau of Naval Personnel Manual*, governs the submission of these pages to the Bureau. A new beneficiary slip is made annually on 1 October and whenever else changes occur. For men of certain pay grades drawing money allowance for quarters for dependents (MAQ), two copies of the beneficiary slip are furnished the disbursing officer carrying the pay accounts.

Page 9 is the backbone of the service record. On the service record page 9's will be found two kinds of records: on the regular page 9 is entered a chronological record of service during enlistment; and on a series of special page 9's (followed by a letter as 9T, 9U, etc.) is entered a record of changes in pay status. Attention is invited to the *Bureau of Naval Personnel Manual*, Article D-4022, for full information regarding entries to be made thereon, and Article D-4002(3), regarding the sending of copies to the Bureau of Naval Personnel.

At the top of a regular page 9 is shown the man's full name, service number, present rate, date received aboard present ship or station, and former ship or station. At the bottom, used in case of change of station, are two spaces, one to be filled in by the transferring ship or station, and the other by the receiving ship or station. Both are signed by the respective Commanding Officers. The space in the middle of the page is for the chronological record of important events occurring in the enlistee's service and not provided for elsewhere in the record: commendatory and disciplinary action, special training, completion of training courses, application for insurance, authority for transfer, etc.

Marks in proficiency and in conduct are entered on page 10. Only the marks for the period covered on page 9 are entered on the corresponding (reverse

side) page 10. Copies of the completed pages 9-10 are sent to the Bureau of Naval Personnel.

When changes occur in pay status, it is necessary to enter all relevant data in the service record and furnish the disbursing officer an appropriate order. Record of these changes is accomplished by use of the special pages (9T, 9U, 9V, 9W, and 9X) which are prepared with interleaved "snap out" carbons. Each page has a corresponding NavSandA number: 519, 518, 517, 516, and 515, respectively. A new form is required for each change.

Page 9T, Form NavSandA 519, is a record of misconduct and is filled out in quadruplicate, one for the service record, two for the disbursing officer, and one for the medical officer.

Page 9U, Form NavSandA 518, is an individual order to adjust the pay account for absence or sentence of court, or both. One copy is for the service record, one goes to the Bureau of Naval Personnel, and two are for the disbursing officer.

Page 9V, Form NavSandA 517, is the individual order to adjust pay account for quarters or subsistence allowance or commuted rations. One copy goes into the service record and two to the disbursing officer.

Page 9W, Form NavSandA 516, covers the individual order to adjust the pay account for extra pay service. One copy is for the service record and two for the disbursing officer.

Page 9X, Form NavSandA 515, covers a change in rating, or Reserve Class, or a change in longevity for pay purposes. One copy is for the service record, two for the Bureau of Naval Personnel, and two for the disbursing officer.

When an honorable discharge button is issued, notation of the issue will be made on page 9 of the service record of the recipient over his or her signature.

When a man desires to extend his enlistment, Form NavPers 604 (NavSandA 513) is provided. The agreement to extend must be made prior to the expiration of the enlistment. The partially completed form (the agreement part) is placed in the back of the record and a copy sent to the Bureau of Naval Personnel. When the enlistment would have normally expired, the form is completed, effecting the extension. The original is then sent to the Bureau of Naval Personnel. Two copies are furnished the disbursing officer, and one copy is placed in the service record as a page 9 and will serve as a mark between that service recorded for the original enlistment and that recorded for the extension.

Pages 11 and 12, Form NavSandA 512, are the closing-out pages. These are filled out upon cancellation of enlistment, discharge, desertion, death, retirement, or transfer to the Fleet Reserve. The Commanding Officer of the ship or station from which the man is discharged is responsible for the complete filling out of page 12. The original is sent to the Bureau of Naval Personnel in the closed service record. Copies are furnished the disbursing officer as the *Order to Close Account*.

Page 11a, Form NavSandA 514, is an account of sale of deserter's effects and order to transfer the deserter's account to the Desertion Rolls, Bureau of Supplies and Accounts. It supplements pages 11-12 in closing the record of a deserter. A copy is placed in the record and two copies are furnished the disbursing officer.

When a man attains a special qualification in gunnery, a special service record two-page form is made out and inserted in the record. The first page is called the *gunnery record* and the second the *aviation gunnery record*. (Usually it is placed in the record preceding the page 9-10's. No copy is sent to the Bureau of Naval Personnel.)

Many miscellaneous papers and correspondence are kept in the pocket on the inside front cover of the service record and/or in the jacket filed in the Bureau of Naval Personnel. These include such items as the following: induction papers, if the man is an inductee (IND) or a selective volunteer (SV); application for enlistment papers, if the man enlisted voluntarily; consent papers, if the man is a minor; reports of examination for advancement or change in rating (Form NavPers 624); letters written concerning the man; copies of various orders issued the man (change of station, detached duty, etc.); birth certificates; transcripts of educational credits; and various other miscellaneous papers and correspondence.

An important adjunct to the enlisted service record is the Enlisted Personnel Qualifications Card. The card is a record of the qualifications of an enlistee and is provided to be used in assigning a man to training or to duties. The card is originally prepared at the recruit training activity or at a classification center. On the face is recorded a summary of the man's background of civilian education and training and his test scores and physical qualifications on entering the Navy. On the back are recorded changes in these qualifications incident to service, either from training received in service or from duties performed. The specific billets filled by the man including battle stations and types of shipboard gear operated by him, are listed on this side of the card.

On board a ship or station the card is filed separately from the service record for accessibility, but on change of station is considered a part of, and transferred with, the service record.

F. CLASSIFICATION OF ENLISTED PERSONNEL

A major responsibility of every naval officer is the efficient utilization of the enlisted personnel serving under him. This requires the proper assignment and constant training of each man. Therefore, every officer has an obligation to see that his men are assigned to duties which make the best use of their abilities individually and as a crew, and that the men are constantly given opportunity and stimulation for training to improve their performance in their present duties and to qualify for appropriate billets requiring a higher degree of competence.

In order to discharge this responsibility successfully it is essential that an

officer have, in addition to an understanding of the jobs to be performed by the men in his command, adequate knowledge of the qualifications of each man under him—his general level of intelligence and ability, his civilian education and work experience, his Navy training and experience, his physical characteristics, and his interests and personal characteristics. This knowledge is required for the proper initial assignment of the man, for guiding his training, and for qualifying him for advancement in rating, or selecting him for advanced and specialized schools.

For this purpose, an Enlisted Personnel Qualifications Card (NavPers 609) has been designed to assemble in one compact, convenient record all the information considered most important regarding each enlisted man's background and abilities. The face of the card contains:

- a. scores made by the man on the Navy Basic Battery of Classification Tests
- b. his age
- c. pertinent physical qualifications
- d. civilian education and work experience
- e. hobbies and interests
- f. other personal data having to do primarily with his civilian background.

The back of the card contains a cumulative running record of the man's training and experience in each of his previous Navy billets. The following information is included:

- a. date of each transfer, change of rate, or change of billet
- b. service schools attended and marks achieved
- c. types of ships to which assigned
- d. specific billets to which assigned
- e. specific types and models of gear with which experienced.

This card is originally processed through a personal interview conducted with each man by a specially trained classification interviewer (Sp(C)). Since 15 June 1943, the Enlisted Personnel Qualifications Card has been initiated for all recruits entering the Navy, as an integral part of the recruit training program in naval training centers. Cards for all other men have been or are being prepared by mobile classification units or by classification centers in receiving ships and stations and other personnel distribution activities through which enlisted personnel are processed.

The card accompanies the man throughout his naval career. The information recorded on the card is initially used at naval training centers for the selection of recruits to be assigned to service schools or to other types of training or duty. It is later used by classification centers in classifying and selecting crews for ships, in making recommendations for the assignment of men to divisions and billets aboard ship, and in the classification of personnel in the various types of advance base and amphibious units. The card is also used continuously in the naval district personnel offices for control and assignment purposes and on all ships and shore stations for a variety of purposes.

Guidance for interpreting the various specific entries on the Enlisted Person-

nel Qualifications Card is provided in the brief manual entitled Use of the Enlisted Personnel Qualifications Card, (NavPers 16703) which may be obtained from the Bureau of Naval Personnel. Every officer should have a copy of this manual available for convenient reference.

Officers will find the information contained in the Enlisted Personnel Qualifications Card of great utility and value on either a ship or shore station. Among the more important standard uses of the card are the following:

A. Determining Assignments of Non-rated Men. An officer frequently faces the problem of determining assignments for seamen without previous naval experience or training of specialized nature. It is necessary to assign such men to striker billets aboard ship, to select some of them for assignment to operational training, to prescribe training courses for some of them, to decide which are the most promising petty officer material, and so on. The Enlisted Personnel Qualifications Card is the best available source of information for use in solving this type of problem.

B. Determining Assignments for Rated Men. The Enlisted Personnel Qualifications Card is likewise of value in assigning petty officers to general quarters stations, watch stations, and routine duties aboard ship and to appropriate shore station billets, including advanced schools. The back of the card indicates the types of ships on which the man has served, the specific billets in which he served aboard those ships, and the specific types and models of gear with which he has had experience. Such information is essential for proper assignment of petty officers. Experience is increasingly demonstrating that under present conditions there are wide variations in ability, specialization, and types of experience among men in the same rate and pay grade. A man's rating designation does not provide sufficient information regarding his particular abilities and experience to permit effective assignment. For example, in order to make an appropriate assignment of an electrician's mate, first class, it is necessary to have the following information:

1. Does the man have sea experience?
2. What type of ship or ships has he served aboard?
3. What Navy schools has he attended or what other special training has he received?
4. In which of the following electrician's mate specialties is he qualified: gyro compass, interior communications, fire control, power and lighting, main propulsion, degaussing, or electric hydraulics?
5. Within one or more of the above specialties, with what particular types and models of gear has he had experience?

In most receiving stations, operational training activities, and major personnel distribution activities, classification centers staffed by specially trained classification officers and classification interviewers are available to assist shipboard officers in assessing qualifications of the members of the crew and indicating the billets for which each man is best qualified. Such centers are also responsible for classifying men coming in from the Fleet for appropriate assignment

NAVAL ORIENTATION

U. S. NAVY ENLISTED PERSONNEL QUALIFICATIONS CARD												IMP. NAV. PERS. 609 (3-45)											
FIRST			LAST NAME			MIDDLE			RATE AT ENLIST.			(4) BR. CL.			(5) CO. NO.			(6) MO. DAY YEAR			DATE OF ENLISTMENT		
A	835	03	24	Johnson			(none)					AS	V-6-S	5217	1	15	15	43					
	(7) G. C. T.		(8) READINGS	(9) ARI	(10) MATH	(11) SPELL	(12) CLER	(13) RADIO	(14) MK MECH	(15) MK ELEC.	(16) BIRTH DATE	(17) MO. DAY YR	(18) OCC. CODE										
B	493	45-3	52-3		57-2	43-4	42-4	48-3	58-2	56-2	2	12	18	5-81-910									
C	HOME ADDRESS	CITY OR TOWN AND/OR COUNTY			STATE	BIRTHPLACE	CITY OR TOWN AND/OR COUNTY			STATE	RACE	MAR. ST.	NO. DEP.	REL. PREF.									
FATHER'S BIRTHPLACE	CITY				WORTH P. S. BIRTHPLACE	CITY				Worth, Ohio	W	M	M	2	Prot.								
D	PREVIOUS MILITARY OR SEA DUTY	FROM	TO	ARM OR SERVICE			TYPE OF DUTY																
E	MOST SIGNIFICANT EDUCATION			YEARS ATTENDED	3	YEAR LEFT SCHOOL	36	NON-ENGLISH															
F	YRS. EDUC.	GRAD.	DIPLOMA	NAME OF INSTITUTION						MAJOR COURSE			LEISURE TIME ACTIVITIES										
11	No	—	—	Tupper Lake, Saranac, N. Y.						Shop			Photography—candid camera—2.5 lens										
SPECIAL STUDIES	1	ALG.	GEOM.	TRIG.	PHYS.	TYP.	SHORT.	MACH.	WOOD.	WORK	SHOP		Develops and prints										
SPECIALIZED TRAINING (VOCATIONAL, TECHNICAL, TRADE, BUSINESS,												SPORTS IN WHICH QUALIFIED			Talent for Public Entertainment			HIGHEST POSITIONS OF LEADERSHIP (INCLUDING MILITARY)					
																					Lions club—local vice-pres.		

APPENDIX

425

MAIN OCCUPATION DICTIONARY TITLE:		WHEN MAN IS DETACHED, INSERT THIS CARD IN HIS SERVICE RECORD.	
3 Automobile—repair serviceman		SECOND BEST OCCUPATION (DICT. TITLE)	
EMPLOYER FIRM NAME:		4 ADDRESS OF EMPLOYER (ST., CITY, STATE)	
McSon's Auto Service		Scranton, N. Y.	
5 FUND OF BUSINESS		DEPARTMENT OR SHOP	
General auto repair		Shop	
YRS SERVICE		WKL. WAGE	
1 1/2		55.00	
DUTIES, SKILLS, MACHINES		TRADE TEST	
Advanced from helper to auto mechanic to service manager supervising 12 men who serviced, repaired, and overhauled auto engines, carburetors, ignition systems, and accessories, made job cost estimates—no body, frame, or axle work.		TRADE TEST RATING	
6 TRADE TEST		7 WELL-INFORMED	
Automobile mech.		Well-informed	
8 MARKS		INTERVIEWER'S SIGNATURE	
Interviewed—5-21-43—RS—Boston, Mass.—GJM. " 4-15-44—RS—Norva—Chf. " 2-5-45—RS—Phila, Pa.—COP.		William Johnson	
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NAVAL ORIENTATION

MAN'S LAST NAME		SERVICE RECORD			MAN'S SERVICE NO.						
DATE	REASON FOR ENTRY	SHIP OR STATION	TYPE	RATE	DUTIES, EQUIPMENT AND GO STATION			PROF. IN RATE	P. O. ABIL.	CON- DUCT	EXEC. OFF. INITIALS
1-15-43	REC	Bainbridge	NTC	AS	Recruit Training—CO. APO						
3-11-43	CR	"	"	S2C							
5-21-43	REC	Boston, Mass.	RS	FIC(MoMM)	FFT	USS SC					
6-29-43	REC	USS SC	SC	FIC(MoMM)	Aboard 7 mos. GM 16-278 A & GM 6-71 Diesels—stood						
11-1-43	CR	"	"	MoMM2C	Operated auxiliaries—Diesel—generators, cyclotherm						
4-15-44	REC	Norva	RS	"	Boiler and evaps.						
6-22-44	REC	USS Moe	DE	"	Classified—category SB						
2-5-45	REC	Philtc., Pa.	RS	MoMM2C	A board 7 mos. GM 16-278 A & GM 6-71 Diesels—stood						
					main engine and throttle watches. Overhauled GM						
					unit fuel injectors and Marquette governors.						
					Does own shoot work. Damage control exp:						
					overhauled drainage pumps 5 days following						
					collision-made port.						
					Classified—category SA (GM 16-278A)						

DATE	TRAINING COURSE OR SERVICE SCHOOL (INC. UDIN'S LOCATION)	NO. WKS. TAKEN	MARK	SKILLS OR EQUIPMENT	REMARKS
3-17-43	NTSch Diesel, Richmond, Va.	8	91	Basic Diesel instruction. Grad. 1 ^½ /40 FIC(MoMM)	
5-1-44	NTSch Diesel, Cleveland, O.	5	3.4	Factory adv. training GM 16-278A & GM 6-71	

Figure 119. Enlisted Personnel Qualifications Card (back).

to advanced schools, shore duty billets, or reassignment to new construction or commissioned ships.

C. Identifying Special Skills and Qualifications. Particularly on larger ships and shore stations, Enlisted Personnel Qualifications Cards have proved valuable in identifying personnel with unusual special qualifications which are not indicated by the rating designators of such men. For example, by means of the Enlisted Personnel Qualifications Card it is possible to ascertain conveniently and quickly, even in a large ship's company, those men who have special qualifications as barber, tailor, musician, interpreter, linguist, motion picture projection machine operator, athletic coach, life saving instructor, commercial artist, or some other such special skill unrelated to the man's regular duties.

In the routine operations of a ship or shore station, as well as in cases of emergency, it is frequently important that men with such special skills be readily identified. For ships' crews processed through a classification center, a cross-index file of special skills is prepared for the convenience of the shipboard officers. Such a file provides readily available information of this type regarding special or unusual skills possessed by any member of the crew.

D. Supplying Supplementary Information of Value in Connection with Morale, Discipline, etc. The Enlisted Personnel Qualifications Card may afford considerable assistance in dealing with cases of low morale, poor performance of duty, disciplinary offenses, and related problems of personnel administration which an officer often encounters. In order to reach an intelligent judgment as to what appears to be poor performance of duty on the part of a particular man, it is necessary to know something about that man's background and his level of abilities. For example, a man's morale may be low because he is a man of high ability assigned to a low-grade routine job; or on the other hand, his poor performance of duty may be due to the fact that he is in a billet which is far too difficult and complex for his level of intelligence and ability. In dealing with all such problems the more an officers knows of the relevant facts about his men, the more successfully he should be able to handle those problems.

In summary, the Enlisted Personnel Qualifications Card has been designed to serve as a source document for all enlisted personnel considerations, with emphasis on qualifications data for placement purposes. It is provided as an aid to assist officers in the appropriate utilization of personnel, and experience has indicated that, with intelligent use, it serves this purpose well.

G. RATING DEFINITIONS

AEROGRAPHER'S MATES.—Use such instruments as barometers, thermometers, anemometers, theodolites, barographs, thermographs, and radiosondes to obtain data such as direction and velocity of the wind, atmospheric pressure, height of clouds, dew point, and humidity. This information, together with information received from other weather stations, is used in the preparation of weather charts for planning aerial and surface operations and in the computation of ballistic data.

AIRSHIP RIGGERS.—Maintain and repair the rigging, fabric, and controls of airships and free balloons. They inflate, deflate, adjust and check airships filled with helium and other gases. They prepare them for flight, go aloft to make operational tests and checks of the controls, and while an airship is in a hangar or moored to a mast they see that the proper pressure and trim is maintained. Assist in laying out and assembling mobile mooring masts. Operate ordnance equipment used in non-rigid airships.

AVIATION BOATSWAIN'S MATES (AG) (Arresting Gear and Barrier).—Operate, maintain and repair arresting gear and barrier installations of the flight decks of aircraft carriers. Operate deck machinery such as winches, cranes, and elevators; tie down planes and assist in handling them on flight and hangar decks; assist in fire fighting and serve in crash details.

AVIATION BOATSWAIN'S MATES (CP) (Catapults).—Operate, maintain and repair catapult installations used to launch planes. Operate deck machinery such as winches, cranes, and elevators; tie down planes and assist in handling them on flight and hangar decks; assist in fire fighting and serve in crash details.

AVIATION BOATSWAIN'S MATES (GA) (Gasoline System).—Operate, maintain and repair aviation gasoline, oil and inert gas storage and distribution systems on aircraft carriers and at air stations. Operate deck machinery such as winches, cranes, and elevators; tie down planes and assist in handling them on flight and hangar decks; assist in fire fighting and serve in crash details.

AVIATION BOATSWAIN'S MATES (PH) (Plane Handling).—Supervise plane handling crews in spotting, directing and handling aircraft aboard aircraft carriers or at air fields; assist in beaching, mooring, fueling, and launching patrol aircraft; operate winches, cranes, elevators, and other equipment used in hoisting or lowering planes; are responsible for the proper tracing and securing of aircraft; assist in extinguishing aircraft fires and serve in crash details.

AVIATION ELECTRICIAN'S MATES.—Maintain, repair, and install all types of electrical equipment and wiring used in aircraft. This includes the disassembly, repair, and reassembly of such units as electric motors, generators, regulators, distributors, and switches, and the repair of ignition, lighting, warning signal and fire control circuits.

AVIATION FIRE CONTROLMEN.—Install, maintain, repair, and overhaul aviation fire control equipment including bombsights, automatic pilots, stabilized bomb approach equipment, and other intricate mechanisms. Load gun and torpedo cameras. Operate bombing trainers and instruct pilots in their use.

AVIATION MACHINIST'S MATES.—Inspect, test, adjust, repair, and overhaul all types of naval aircraft engines. When assigned as plane captains, they are responsible for the operating condition of the aircraft and make all prescribed periodical checks. Make many types of routine repairs to the control cables, fabric, hydraulic systems, oxygen transfer equipment, and other parts of a plane. The more complex adjustments and repairs to carburetor and fuel systems, hydraulic assemblies, instruments, propellers and gas turbines are done by men in the specialized ratings of AMMC, AMMI, AMMP, and AMMT, AMMH.

AVIATION MACHINIST'S MATES C (Carburetor Mechanics).—Install, maintain, repair, and adjust carburetors, fuel pumps, and other components of the fuel system. Diagnose and analyze the operation of the fuel system to insure efficient aircraft engine performance.

AVIATION MACHINIST'S MATES F (Flight Engineers).—Are responsible for the efficient performance of aircraft engines during flight, except when taking off, landing or taxiing. Make the final inspection of the plane before flight, maintain engine performance records and make emergency repairs to engine and fuel systems during flight. Analyze and diagnose engine malfunctions and submit findings to line chief upon return to air base. Men in this rating are assigned to multi-engined planes only. When they are assigned to a combat squadron they also serve as machine gunners.

AVIATION MACHINIST'S MATES H (Hydraulic Mechanics).—Specialize in the maintenance, repair, and testing of hydraulic systems and equipment on naval aircraft such as valves, power pumps, actuating cylinders, pressure regulators, pressure accumulators, and shock struts. Refill hydraulic reservoirs, adjust timing of systems, replace damaged or faulty tubing, and perform simple machine shop work such as turning cylinders and grinding valve seats.

AVIATION MACHINIST'S MATES I (Instrument Mechanics).—Specialize in installing, overhauling, calibrating, cleaning and repairing aircraft instruments such as automatic pilots, directional gyros, artificial horizons, turn and bank indicators, tachometers, cylinder temperature indicators, suction and pressure gages, air speed indicators, etc. In testing these devices, they use complex instruments, and in making repairs, they use small hand tools and precision tools such as a jeweler's lathe.

AVIATION MACHINIST'S MATES P (Propeller Mechanics).—Specialize in checking, repairing, and overhauling naval aircraft propellers, including variable pitch propellers. Straighten, realign and balance propeller blades; analyze faulty operation of propeller controls, governors and synchronizers; and replace defective parts in the propeller assembly.

AVIATION MACHINIST'S MATES T (Gas Turbines).—Repair and maintain gas turbine power plants used in jet propelled planes and conventional type aircraft with jet booster. Duties may also include servicing conventional type aircraft engines. Make many types of routine repairs to control cables, fuel systems, oxygen transfer equipment, and other parts of a plane. The more complex adjustments and repairs to carburetor and fuel systems, hydraulic assemblies, instruments, and propellers are performed by men in the specialized ratings of AMMC, AMMH, AMMI, and AMMP.

AVIATION METALSMITHS.—Maintain and repair metal aircraft surfaces and fittings. Lay out, cut, bend, form, fit, and rivet, weld, and braze sheet metal in fabricating, sew metal sections for a plane. Repair, or fabricate and replace all types of metal tubing used in aircraft. In addition, they repair or fabricate the plastic and fabric parts of aircraft. Disassemble, reassemble and align all airplane structural parts such as wings, elevators, ailerons, and rudders. Also repair air-

craft equipment made of rubber and plastic such as de-icers, self-sealing fuel tanks, enclosures (green houses), and life rafts.

AVIATION ORDNANCEMEN.—Maintain, repair, and install aviation ordnance equipment including small arms, machine guns, bomb racks, bomb releasing mechanisms, and bomb handling equipment. Overhaul, synchronize, boresight and adjust aircraft armament. Rerarm planes for combat by installing ammunition belts and drums, bombs, torpedoes, rockets, depth bombs, and mines. Make field adjustments and minor repairs to turrets. Also install target towing equipment, cameras, flares, and smoke screen apparatus.

AVIATION ORDNANCEMEN T (Aviation Turret Mechanics).—Install, maintain, repair and overhaul electric and hydraulic aircraft turrets. Make all kinds of adjustments including boresighting, zoning, and harmonizing turrets, and repair or replace defective electrical, mechanical or hydraulic components of the mechanism.

AVIATION PILOTS.—Are pilots or co-pilots on flights of a non-tactical nature such as ferrying, general utility flying and liaison flights. Some men in this rating are qualified to operate airships and are so designated by the letters (LTA) following their rating.

AVIATION RADIOMEN.—Operate and maintain radio, radar, and other types of electronic equipment used in navigation and detection on naval aircraft. Maintain visual communications by such systems as flashing light, flag hoists, semaphore, and pyrotechnics. Encipher and decipher messages. Operate machine guns in aircraft. Perform routine maintenance of electronic equipment, and in emergencies, make repairs. In most cases, however, repairs are made by Aviation Radio Technicians.

AVIATION RADIO TECHNICIANS.—Install, maintain, and repair radio, radar, and other types of electronic equipment used in communication, navigation, and detection on aircraft. Repair vacuum tube circuits, calibrate transmitters, make pre-flight checks of all aircraft electronic equipment, and clean and lubricate motors, generators, and other moving parts of equipment.

BAKERS.—Do all types of baking aboard ships and at shore establishments of the Navy. Estimate provisions needed, prepare requisitions, and see that supplies are properly stowed to prevent deterioration. On small ships these duties are performed by Ship's Cooks.

BOATSWAIN'S MATES.—Perform many types of deck duties aboard ships including the maintenance of running rigging, standing rigging, ground tackle, davits, boat falls, canvas articles, fenders, mooring lines, and nets. Supervise work parties engaged in chipping, painting, and cleaning various sections of the ship's hull, superstructure, or living compartments. Supervise the lowering and raising of ship's boats, maintain them and operate them. Boatswain's Mates are also members of gun crews.

BOATSWAIN'S MATES A (Masters at Arms).—Perform supervisory and administrative duties at naval shore stations. They maintain discipline; supervise the movement of groups of men; see that security regulations are enforced; inspect

living quarters and dining halls for cleanliness; maintain order at large gatherings such as at movies, athletic contests, ceremonies, etc.; assist in planning recreational programs; and supervise the confinement, transfer, or release of prisoners.

BOILERMAKERS.—Maintain and repair marine boilers and heat exchangers such as evaporators and condensers. Stand watches at boilers and other fireroom equipment. Repair or replace various components of this equipment, such as tubes, headers, casings, and manhole covers. Repair boiler brickwork, analyze boiler and feed water, and add boiler compound to neutralize water impurities. Make hydrostatic tests to detect leaks in the system.

BUGLEMASERS.—Form drum and bugle corps, lead band in marching maneuvers, sound bugle calls and flourishes at ceremonial functions, and supervise and train buglers. Play base drum, snare drum, cymbals, and bugle.

BUGLERS.—Are non-rated men who sound bugle calls appropriate for the order being given. Also clean decks and compartments, act as messengers, telephone talkers, and members of gun crews, and handle mooring lines and ground tackle.

CARPENTER'S MATES.—Do all types of carpentry work, such as the making or repairing of small boats, ladders, spars, deck planking, furniture, grating, doors, and lockers. Are members of damage control repair party who shore up bulkheads to withstand heavy loads or strains; rig collision mats; caulk leaking seams; and make other emergency repairs. Test compartments, doors, ports and hatches for watertight integrity by hydrostatic methods. Refill fire extinguishers. May operate anchor windlass, winches, and other deck machinery.

CHIEF COMMISSARY STEWARDS.—Take charge of galley, butcher shop, bakery and commissary storerooms. Prepare balanced menus in accordance with Navy standards, keep cost accounts, order provisions, check deliveries of provisions for quantity and quality, and supervise the proper handling and storage of all foodstuffs. Coordinate the work and training of ship's cooks, bakers, and butchers to achieve efficient operation of all commissary activities.

COOKS.—Operate galleys for the preparation of meals for officers' messes, doing all the cooking, baking and butchering required. Prepare balanced menus, order foodstuffs, inspect all provisions supplied to the officers' galleys, and see that they are properly stowed. See that sanitary conditions are maintained.

COXSWAINS.—Are under the supervision of boatswain's mates and assist them in the maintenance of running rigging, standing rigging, ground tackle, davits, boat falls, canvas articles, fenders, mooring lines and nets. Operate boats and take charge of boat crews. Chip, paint, and clean various sections of the ship's hull, superstructure, or living compartments. Are members of gun crews.

ELECTRICIAN'S MATES.—Maintain and repair all electrical equipment (with the exception of fire control and electronic equipment), including motors, generators, battery chargers, telephone systems, signal systems, electrical controls, power distribution systems, and lighting systems. Operate searchlights. Stand watch on various types of electrical equipment in operation, such as motors, generators,

and switchboards. Some men in this rating are qualified, by virtue of advanced technical training, to make complicated repairs and adjustments to gyro compasses or interior communications systems, and are so designated by the initials (GY) or (IC).

FIRE CONTROLMEN.—Operate, maintain, and repair the intricate electro-mechanical devices used in the fire control system. This equipment includes rangekeepers, computers, directors, switchboards and associated units. Also adjust optical rangefinders and make minor repairs not requiring the services of a Special Artificer O. Make all operational tests and checks required to insure the accurate solution of the fire control problem.

FIRE CONTROLMEN O.—Are primarily operators of the fire control equipment. This equipment includes rangefinders, computers, radar, directors, switchboards, and associated units. Conduct all operational tests and checks and perform routine maintenance jobs.

FIRE CONTROLMEN S.—Operate, maintain, and repair all electro-mechanical, and optical devices used in the fire control system of a submarine.

FIREMEN.—Are nonrated men who are strikers for one of the engine room ratings. As such they assist machinist's mates, water tenders, boilermakers, and electrician's mates in performing the simple tasks of those ratings. Under direction, they light off boilers, turn pumps or motors on or off, record readings of various gages and thermometers, record the quantity of fuel oil and water in tanks, lubricate machinery, and clean fireroom and engineroom.

GUNNER'S MATES.—Operate, maintain, and repair all types of naval guns, including small arms. Repair the various mechanical and hydraulic systems used in guns, turrets, ammunition hoists, etc. Supervise the proper stowage and handling of powder and projectiles. Supervise non-rated men in the handling rooms, magazines, and at gun mounts and see that all safety precautions are observed. On ships with turret guns, Gunner's Mates may advance to Turret Captains.

HOSPITAL APPRENTICES.—Are non-rated men in the Hospital Corps who are striking for the rating of Pharmacist's Mate. Perform elementary duties such as arranging dressing carriages with sterile instruments, dressings, bandages, and medicines; applying dressings; recording pulse, temperature and respiration; catheterizing and giving morning and evening care to patients, and administering hypodermic injections to patients. Keep medical records and perform routine clerical duties.

MACHINIST'S MATES.—Operate, maintain, and repair main propulsion steam engines, either reciprocating or turbine types, and auxiliary engineroom equipment such as pumps, compressors, valves, oil purifiers, heat exchangers, governors, and reduction gears. Also maintain machinery outside of the engineroom such as the steering engine and anchor windlass. On smaller types of vessels they also operate and maintain refrigeration and air conditioning equipment. Repairs requiring machine shop work are generally performed by Machinist's Mates S.

MACHINIST'S MATES G (Industrial Gas Generating Mechanics).—Install, operate, and maintain portable equipment used in generating, transferring, and stowing industrial gases, including oxygen, acetylene, carbon dioxide, nitrogen and hydrogen. Analyze raw materials and gases at various stages of production to insure proper quality. In some cases they test, purify, and transfer helium.

MACHINIST'S MATES R (Refrigeration Mechanics).—Operate, maintain, and repair refrigeration and air conditioning equipment found on large ships for making ice and for maintaining proper temperatures in meat rooms, sensitized film rooms, powder magazines, and other parts of ships where temperatures must be carefully controlled. On smaller types of vessels this work is usually performed by Machinist's Mates.

MACHINIST'S MATES S (Shop Machinists).—Perform all types of machine shop work requiring the skillful use of lathes, shapers, milling machines, grinders, power hacksaws, drill presses, and other machine tools, as well as all hand tools and measuring instruments used in a machine shop. Are not included in the complement of smaller types of ships. On these vessels emergency machine shop work is done by Machinist's Mates or Motor Machinist's Mates.

MAILMEN.—Operate Navy post offices providing for naval personnel the services commonly offered by government post offices, including money order transactions, registry and insurance of mail, distribution and forwarding of mail, and maintenance of directories.

METALSMITHS.—Perform duties under supervision of Engineering officer. Fabricate and repair sheet metal structures. Perform such operations as laying out, forming, rolling, bending, brazing, welding, soldering, and riveting sheet metal. Cut, bend, thread, and fit pipes. Do various types of blacksmith's work including tempering, hardening, and annealing metals and testing them for hardness. Also maintain the watertight integrity of the ship by making hydrostatic tests of doors, hatches, ports and manholes. As members of a damage control repair party, they make emergency repairs such as caulking or patching leaks in the hull, tanks, or bulkheads; and shoring up damaged bulkheads.

MINEMEN.—Overhaul and adjust all types of naval mines, depth charges, handling equipment, and releasing mechanisms. Prepare mines and depth charges for dropping. Load and stow them on ships, and operate releasing mechanisms. Test component parts of mines for proper operation and make special electrical hookups.

MOLDERS.—Operate foundries aboard large ships or at shore stations where they make molds and cores, rig flasks, prepare heats, and pour castings of ferrous, nonferrous, and alloy metals. Shot blast or sand blast cooled castings and test for hardness and defects. Maintain and repair furnaces, cupolas, and flasks.

MOTOR MACHINIST'S MATES.—Operate, maintain and repair internal combustion engines. Most of the men in this rating are employed in the operation and repair of engines in Diesel-driven ships and amphibious craft. Some, however,

work entirely with high-powered gasoline engines such as are used in motor torpedo boats. On Diesel-driven ships they also operate and maintain auxiliary engine room equipment and operate and maintain refrigeration and air conditioning equipment.

MUSICIANS.—Form bands which provide martial music at ceremonies and parades, dance music at recreational functions, and symphonic music at concerts. Play all kinds of brass, percussion, woodwind, and stringed instruments. Plan various types of musical programs. Make special arrangements and transcriptions.

PAINTERS.—Do all types of painting required to protect, preserve, camouflage or decorate various parts of a ship. Prepare all types of metal or wooden surfaces for painting, mix and match paints, and apply them by means of spray guns or brushes. Sandblast ships' bottoms. By means of special techniques, may perform such jobs as applying hot plastic paints to ships' bottoms and painting imitation wood grain on metal surfaces. Collateral duties include inspecting, testing, and filling portable fire extinguishers, and testing ports, hatches, and doors for water-tight integrity.

PAINTERS V (Aircraft Painters).—Use brushes or spraying equipment to paint aircraft surfaces with dopes, lacquers and enamels. Do specialized types of painting including camouflage painting, insignia painting, and lettering. Prepare all types of aircraft surfaces for painting by scraping, sanding, and buffing, and mix and match paints. Also make minor repairs to fabric covered skin surfaces of aircraft.

PARACHUTE RIGGERS.—Pack, maintain, and repair parachutes, aviation clothing, life rafts, life jackets, and other types of equipment used by aviators. Inspect parachutes for tears and weak spots, and see that they are properly dried, aired, and stored. Make dummy drop tests.

PATTERNMAKERS.—Make wooden or metal patterns, core boxes, and flasks used by molders in a naval foundry for molding castings. Mount patterns on molding board for production molding. Make master patterns and core boxes for casting aluminum and brass patterns. Finish metal patterns. Make full scale layouts of wooden patterns, core boxes, and templates. Index and store patterns.

PHARMACIST'S MATES.—Perform numerous types of medical and clerical duties in the Hospital Corps. In addition to the usual duties of applying first aid to men injured in combat, many Pharmacist's Mates are technicians in specialized fields such as X-ray, clinical laboratory, pharmacy, epidemiology and sanitation, fever therapy, etc. Some men in this rating are dental prosthetic technicians, skilled in making artificial dentures, bridges, in-lays, crowns, etc., and are designated as such by the initials (DP) following their rating.

PHOTOGRAPHER'S MATES.—Film battle operations, make aerial maps of enemy territory, and make pictorial records for training, documentary, and other purposes. Use various types of motion picture and still cameras and perform all photographic functions from taking pictures to processing negatives, prints, and enlargements.

PRINTERS.—Operate letterpress printing equipment at shore stations and aboard ship, and perform duties including copy preparation, composition, presswork, and binding. Operate linotype machines, small automatic press, hand operated cutter, and binding equipment. In the larger shops they operate multicolor presses. Clean, lubricate, and maintain equipment.

PRINTERS L (Lithographers).—Perform highly specialized press or transfer functions on offset lithographic equipment designed for commercial scale reproduction. Some of the men in this rating are press operators who prepare plates, and ink, adjust, and run presses; while others are transfer men who clean and store plates, and perform transfer operations involved in preparation, restoration, and proper maintenance of lithographic plates. Clean, lubricate and maintain equipment.

PRINTERS M (Offset Process).—Serve the general offset lithographic production needs in those installations where a high degree of specialized skill in press operation is not required. Make up original copy from rough drafts and reproduce it photographically. Opaque, retouch, and cut in negatives, and from them develop zinc plates. Set finished plates on roll and operate press. Finish and bind the printed copy. Maintain presses and preserve plates.

QUARTERMASTERS.—Steer the ship. Assist the navigator and O.O.D. by taking bearings on buoys, lighthouses, and other ships; taking soundings; marking the time of sights; determining compass error; computing time of sunrise, sunset, moonrise, and moonset; and in some cases by taking sights of celestial bodies. Take care of instruments used by navigator. In addition, they correct charts and other navigational publications, make weather observations, keep logs, remind O.O.D. of details in the plan-of-the-day. On small ships, may assist signalmen in maintaining visual communication.

RADARMEN.—Operate search radar to detect presence of ships and aircraft and to supply navigational data, make operational adjustments including calibration. Operate IFF equipment. Plot the track of targets in relation to own ship and determine their course and speed. Maintenance and repair of the equipment is performed by radio technicians.

RADIOMEN.—Operate radios, radiotelephones, radio direction finders, and radio navigational aids. Transmit messages by Morse code or voice, type incoming messages, use cryptographic devices for decoding headings, and perform clerical duties in the communications division. Make all operational adjustments to equipment and perform minor maintenance and repair jobs. Most of the repairs to this equipment are performed by Radio Technicians.

RADIO TECHNICIANS.—Maintain and make all types of repairs to radio, radar, sonar, and other types of equipment employing electronic circuits. Use special testing equipment such as cathode ray oscilloscopes, frequency meters, and tube testers. Disassemble equipment and replace defective parts. Calibrate, tune and adjust equipment.

SEAMEN.—Are nonrated men who are strikers for all ratings except those of the Engine Room and Steward's Branches, and the ratings of Pharmacist's Mate,

Buglemaster, and Musician. As such they assist Boatswain's Mates, Signalmen, Radiomen, Yeomen, and petty officers in other ratings for which they may be striking. Are members of work parties performing routine duties such as handling mooring lines; polishing bright work; swabbing decks; cleaning deck machinery such as the anchor windlass and winches; removing old paint from decks, bulwarks, ladders, superstructures, etc.; and handling ground tackle.

SHIPFITTERS.—Perform duties under supervision of First Lieutenant. Do all types of pipe fitting work. Make hydrostatic tests of valves, fittings, hatches, ports and watertight doors, and make any repairs to them necessary to maintain watertight integrity. Make repairs to deck plates and hull, involving welding, brazing, drilling, riveting, and caulking. Also, fabricate sheet metal structures such as lockers, cowling, ventilators, and ducts. Do various types of blacksmith work. As members of a damage control repair party make emergency repairs such as shoring up bulkheads and plugging leaks in hull. Test and refill portable fire extinguishers.

SHIP'S COOKS.—Do all the cooking for the general mess aboard ships or at shore stations. Prepare menus to provide a balanced diet in accordance with Navy standards. Store food and see that proper temperatures for the preservation of foodstuffs are maintained. On small ships may also do all baking and butchering.

SHIP'S COOK B (Butchers).—Perform all the duties incident to the preparation of meat, poultry, and seafood. Are responsible for the sanitary, efficient operation of large butcher shops ashore. On ships these duties are performed by Ship's Cooks.

SHIP'S SERVICE MEN B (Barbers).—Operate Navy barber shops afloat and ashore providing most of the services commonly offered by barber shops.

SHIP'S SERVICE MEN C (Cobblers).—Make all types of shoe repairs, including replacing worn soles, heels, innersoles, counters, heel linings, pads, and plates, repairing broken shoe arches, patching holes and tears in uppers, and rebuilding shoes. Perform simple orthopedic work. Repair various other types of leather goods. Maintain shop equipment.

SHIP'S SERVICEMEN L (Laundrymen).—Operate naval laundries afloat or ashore, providing most of the services commonly offered by laundries, including washing, ironing, starching, stain removing, and packing. Operate and maintain washing machines, extractors, tumblers, pressers, and flatwork ironers.

SHIP'S SERVICE MEN T (Tailors).—Operate naval tailor shops for the pressing, cleaning, alteration, and repair of uniforms worn by naval personnel. Repair tears, attach buttons, sew on insignia, remove stains, alter uniforms, do embroidery, and clean and press uniforms. Maintain shop equipment.

SIGNALMEN.—Maintain visual communications by flashing light, semaphore, and flag hoist systems of signaling. Stand lookout watch to receive signals from other vessels and aircraft, and to recognize enemy ships and aircraft. Maintain radio-telephone communication with ships and aircraft. On smaller types of vessels they assist Quartermasters and may stand a Quartermaster's watch.

SONARMEN.—Operate underwater sound detection equipment for determining the bearing and range of underwater and surface craft. By means of plotting, they determine the course and speed of the vessel contacted. May use equipment to maintain under-water communication by International Morse Code. Also operate equipment and record the temperature of the water. Repairs to sonar equipment are made by Radio Technicians.

SONARMEN H (Harbor Defense).—Operate and maintain sonic, electronic, and magnetic harbor defense equipment used in detecting the presence, bearing, and range of underwater and surface craft operating in harbor areas. Transmit and receive messages by radio-telephone, flashing light, and signal flags. Operate small craft used in the maintenance of detecting equipment.

SPECIAL ARTIFICERS D (Special Devices).—Install, maintain, calibrate, test, and adjust all types of special training devices, such as Link trainers, flight engineers' training panels, free gunnery trainers, and range estimators. These devices are highly technical in nature and are composed of various complicated mechanical, electronic, photo-electric, optical, and hydraulic units.

SPECIAL ARTIFICERS I (Instruments).—Test, calibrate, and repair instruments, excluding optical parts. Are generally assigned to repair ships.

SPECIAL ARTIFICERS I (TR) (Typewriter and Office Equipment Repairmen).—Maintain and repair typewriters and other office equipment at large shore establishments.

SPECIAL ARTIFICERS I (WR) (Watch Repairmen).—Repair watches and clocks used in the Navy with the exception of chronometers which are repaired at the Naval Observatory.

SPECIAL ARTIFICERS O (Optical).—Overhaul, repair, and adjust optical equipment such as binoculars, telescopes, periscopes, rangefinders, and optical gun sights. Overhaul includes inspection, disassembly, repair or replacement of defective parts, refinishing of surfaces, cleaning, reassembly, collimation, adjustment, sealing, gassing, and drying.

SPECIALISTS (A) (Physical Training Instructors).—Direct groups in calisthenics and drill. Plan and supervise athletic contests and may supervise other types of recreational activities such as games, movies, dances, excursions, and USO entertainment. Instruct classes in wrestling, judo, and swimming, and may also teach classes in various naval subjects not in any way related to physical training.

SPECIALISTS (C) (Classification Interviewers).—Interview, test, and classify enlisted personnel to select men for further training, to place them in the ratings for which they are best suited by virtue of aptitude and experience, and to pick men for specific shipboard billets.

SPECIALISTS (F) (Fire Fighters).—Are primarily instructors who train men to combat fire aboard ship following approved Navy technique of fire fighting. In addition, they are the nucleus of fire fighting units at continental and advanced base naval establishments. Their duties may also include combat fire fighting aboard ship.

SPECIALISTS (G) (Aviation Free Gunnery Instructors).—Train naval personnel in fundamentals of aviation gunnery through the firing of shot guns, service pistols, and .30 and .50 caliber machine guns at fixed and moving targets. Set up, operate, and supervise firing range, and prepare, conduct, and score examinations. By means of synthetic training devices they give students practice in aiming guns correctly. Also instruct in ship and aircraft recognition.

SPECIALISTS (I) (Punched Card Accounting Machine Operators).—Set up and operate punched card machines for accounting or statistical purposes. This equipment includes sorters, collators, reproducers, interpreters, tabulating printers, and multipliers.

SPECIALISTS (O) (Inspectors of Naval Material).—Inspect all types of material during the process of manufacture or assembly for the Navy. They determine that all products for the Navy are manufactured in accordance with the specifications. Men in this rating usually specialize in a particular field.

SPECIALISTS (P) (Photographic Specialists).—Perform general photographic functions including those of photolithography and identification photography.

SPECIALISTS (P) (LB) (Laboratory Technicians).—Process either still negatives and prints or motion picture negatives and prints. Some perform research duties such as testing cameras, films, chemicals, and emulsions.

SPECIALISTS (P) (PG) (Photogrammetry).—Prepare maps and charts from aerial mosaic photographs.

SPECIALISTS (P) (MP) (Motion Picture Production).—Specialize in the production of motion pictures for use in training or in public relations. They generally specialize in one department of motion picture production such as camera work, sound, script writing, cartoon animation, etc.

SPECIALISTS (P) (VM) (V-Mail).—Perform the photographic operations in connection with sending V-mail via microfilm including the operation of automatic printing, enlarging, and developing equipment.

SPECIALISTS (Q) (Communication Specialists).—Do various types of specialized communication work as indicated by the following designators: (CR) Cryptographers; (TE) Technicians; (IN) Radio Intelligence; and (RP) Registered Publications.

SPECIALISTS (R) (Recruiters).—Assist in the procurement of naval personnel by promoting interest and explaining opportunities to prospective applicants. Prepare articles for publication, speak at public gatherings, write letters to prospects, interview applicants, and assist in planning and administering promotional campaigns.

SPECIALISTS (S) (Personnel Supervisors).—Are V-10 personnel (WAVES) who function as personnel supervisors at WAVES' barracks.

SPECIALISTS (S) (Shore Patrol).—Are responsible for maintaining discipline and enforcing all orders, rules, and regulations applying to naval personnel ashore. They assist and cooperate with local, state, and federal law enforcement agencies and other military branches.

SPECIALISTS (T) (Teachers).—Instruct at naval schools. The designator (LT) is given to those who teach instrument flying to pilots by means of a synthetic training device, the Link Trainer.

SPECIALISTS (V) (Transport Airmen).—Allocate space in passenger and cargo planes; supervise the stowage of cargo and mail; and see that planes receive necessary supplies and equipment such as fuel, food, fire extinguishers, life rafts, etc., prior to flight. Keep pilots advised regarding weather conditions, runway conditions, etc.; and act as orderlies during flight.

SPECIALISTS (W) (Chaplains' Assistants).—Assist chaplains by planning religious and recreational programs and by making provisions for suitable instrumental or choral music at such functions. Act as receptionists in chaplains' offices, operate libraries, and perform various routine clerical duties.

SPECIALISTS (X) (Specialists Not Elsewhere Classified).—Perform various types of technical duties not included in other ratings. The nature of the duties is indicated by designators as follows: (ED) engineering draftsmen; (TD) Topographical draftsmen; (CT) cartographers; (PL) plastic experts; (TS) Air station operations desk (time shack); (QM) operations—plotting and chart work; (PI) pigeon trainers; (SB) telephone switchboard operators and supervisors; (VA) visual training aids; (ID) intelligence duties. (Note: Some personnel in this rating are employed as key punch operators or journalists in public relations activities and do not have special designators.)

SPECIALISTS (Y) (Control Tower Operators).—Control all airport traffic at naval air stations in accordance with Army-Navy-CAA standard airport traffic control procedures. Maintain communications with aircraft and other fields by means of radio-telephone, interphone, and flashing light.

STEWARDS.—Supervise Steward's Mates in making officers' beds, cleaning officers' living quarters, and serving meals in the wardroom. Estimate quantity of foodstuffs needed for officers' galleys, prepare menus, supervise stowage of food, and keep various records connected with these duties. In some cases they may perform many of the duties of Cooks.

STEWARD'S MATES.—Serve meals in the wardroom, clean officers' galleys and living quarters, assist Cooks in preparing meals, wash dishes, make officers' beds, and maintain supplies of clean linen.

STOREKEEPERS.—Procure, stow, and issue clothing, provisions, spare parts for equipment, and other items needed aboard ship or at shore stations. Keep an inventory, see that the proper quantity of each item is in stock, prepare requisitions for signature of supply officer, and check incoming supplies for quantity and quality. Prepare and type payrolls and other financial accounts, and audit records. At large stations, payroll and other disbursing activities are handled by Storekeepers D (disbursing storekeepers).

STOREKEEPERS D (Disbursing Storekeepers).—Handle all matters pertaining to Navy payrolls, the disbursing of funds in payment for services or supplies furnished to the Navy, reimbursement of naval personnel for expenses incurred in line of duty, and other financial transactions. Prepare and type financial

accounts and reports. Personnel in this rating are usually employed where disbursing activities are a full-time job (roughly 300 accounts or more).

STOREKEEPERS T (Technical Storekeepers).—Receive, stow, preserve and issue stocks of technical items, exclusive of aviation material, such as spare parts for internal combustion engines, ordnance, and electronic equipment. Prepare and type records and reports. Are usually employed at centers where large volumes of stocks of this nature are accumulated for distribution such as Spare Parts Distribution Centers.

STOREKEEPERS V (Aviation Storekeepers).—Procure, stow, and issue all types of naval aircraft and aeronautical material such as parts for engines, propellers, instruments, ordnance equipment, radios, radar, and accessories such as clothing, life rafts and life jackets. Prepare and type all records and accounts pertaining to the procurement, stock control, and issuance of such equipment.

TELEGRAPHERS.—Operate land-line teletypewriters or telegraph equipment at naval shore communications offices, routing communications traffic and keeping records.

TORPEDOMAN'S MATES.—Prepare torpedoes and depth charges for firing or dropping and operate torpedo tubes, torpedo fire control equipment, and release mechanisms. Maintain and repair intricate torpedo mechanisms, torpedo firing equipment, depth charges, and depth charge release equipment. Supervise stowage of torpedoes and depth charges.

TORPEDOMAN'S MATES E (Electrical).—Maintain and repair electrically operated torpedoes, storage battery charging equipment, and torpedo tubes. Make all adjustments to torpedoes necessary prior to firing. Operate torpedo fire control equipment. Check all electrical and mechanical parts of torpedoes to assure proper operation.

TORPEDOMAN'S MATES V (Aviation).—Test, maintain, and repair torpedoes launched by aircraft. Prepare torpedoes, bombs, depth bombs, and mines for dropping, and load them into aircraft. Store torpedoes, bombs, and other explosives.

TURRET CAPTAINS.—Take charge of the operation, maintenance, and repair of large guns, turrets, and associated equipment. Direct turret crews during battle conditions. Supervise the safe stowage and handling of powder bags and projectiles. Inspect magazines for proper temperatures and test powder. Determine that sprinkler and flooding systems are in constant readiness.

WATER TENDERS.—Operate high pressure steam boilers which supply steam for the main propulsion engines and auxiliaries such as steam driven pumps, turbine driven generators, heating systems, etc. Feed water to boilers, adjust oil burners and blowers to maintain the required steam pressure, and operate various types of pumps used in the feed water, fuel oil, bilge, and fire main systems. Make repairs to pumps, valves, fuel lines, and other fireroom equipment, and assist boilermakers in making repairs to boilers. Test water for purity and keep records of amount of water and fuel oil in storage tanks.

YEOMEN.—Perform a variety of clerical duties including typing, filing, oper-

ating duplicating machines, keeping records, etc. Keep personnel records regarding change in ratings, transfers, disciplinary action, leave, and other matters. Prepare and route official correspondence. Act as recorder for a deck court and as reporter for a summary court martial. At shore stations the duties vary considerably, depending upon the nature of the work in the office to which attached.

CONSTRUCTION BATTALION (Seabee) RATINGS

BOATSWAIN'S MATES (CB) (Boatswains).—Operate and maintain power boats, barges, and other small craft used by a construction battalion in connection with dredging and underwater construction. Operate deck winches for hoisting or lowering equipment, supplies, and materials. Fabricate and maintain rope, wire, and canvas articles. Assist in laying pipe lines used in dredging operations. Maintain visual communications by semaphore or flashing light.

BOATSWAIN'S MATES (CB) (Stevedores).—Operate derricks, cranes, winches, tractors, lift trucks, and other equipment used in loading or unloading vessels. Maintain tackle and accessories and make special rigs for heavy loads. Direct the proper stowage of cargo.

CARPENTER'S MATES (CB) (Builders).—Construct and repair frame and reinforced concrete structures such as warehouses, hospitals, barracks, bridges, trestles, tanks, wharves, cofferdams, etc. Perform auxiliary operations such as shoring, underpinning, pile driving, and capping. Repair boats, set up and operate sawmills and woodworking shops. Supervise grading, excavating, and road construction.

CARPENTER'S MATES (CB) (Draftsmen).—Do drafting required for advanced base construction such as airstrips, waterfront installations, pipe lines, drainage systems, buildings, etc. Prepare specifications and bills of materials. Standard designs and plans are used but are modified in the field to fit local conditions.

CHIEF CARPENTER'S MATES (CB) (Excavation Foremen).—Set grade stakes and supervise the clearing, excavation, and grading of land for building sites, docks, airstrips, roadways, and drainage structures. Direct the placement and use of heavy earth-moving equipment such as bulldozers, power shovels, drag lines, graders, rollers, and trucks.

CARPENTER'S MATES (CB) (Surveyors).—Survey and stake out building foundations, roads, airfields, pipe lines, ditches, and waterfront construction. Do triangulation, topographic, and some hydrographic surveying, and plane table work. Make maps and profiles, and compute cuts and fills.

ELECTRICIAN'S MATES (CB) (General).—Install and maintain electric generating and distributing systems at advanced bases, including switchboards, transformers, inside wiring in buildings, and lighting fixtures. Operate generators to meet the load requirements.

ELECTRICIAN'S MATES (CB) (Communications).—Install and maintain telephone, public address, and inter-office communication systems, and fire alarm systems. Erect poles, and run wire and cable. Maintain and repair component

parts of communications system such as manual type and automatic telephones, generator sets, electric motors, and batteries.

ELECTRICIAN'S MATES (CB) (Draftsmen).—Design electrical, telephone and airfield lighting systems at advanced bases. Prepare working plans and wiring diagrams for erection, installation, and wiring of electrical machinery, power plant equipment and power distribution systems.

ELECTRICIAN'S MATES (CB) (Line and Station).—Erect poles, attach insulators, string wires, and install transformers and distribution panels. Install electrical equipment in power houses, operate generators, and maintain and repair electrical equipment and high tension power lines.

GUNNER'S MATES (CB) (Armorers).—Store, issue, maintain, and repair machine guns, rifles, pistols, mortars, and antiaircraft guns. Store, issue, and repair field equipment such as packs, helmets, gas masks and bayonets. Instruct other personnel in the firing and field stripping of small arms. Assist mine and bomb disposal personnel in disarming unexploded mines, bombs, and shells.

GUNNER'S MATES (CB) (Powdermen).—Do all types of blasting required in connection with advanced base construction. Determine the amount and type of explosive needed to obtain the desired result in such operations as ledge, quarry, road, ditch, or underwater blasting. Lay out, place, and connect charges in the various hookups used in blasting. Supervise the stowage of explosives and other materials.

MACHINIST'S MATES (CB) (Equipment Operators).—Operate and maintain trucks, tractors, bulldozers, power shovels, cranes, carryalls, pile drivers, ditchers, rock crushers, rollers, and blade graders used in advanced base construction. Follow engineer's markings in excavation and construction operations. Use various attachments for special jobs.

SHIPFITTERS (CB) (Blacksmiths).—Forge, weld, temper, and case harden metal fittings, such as shackles, hooks, and pipe brackets required in advanced base construction. Form structural steel members, repair machine parts, and make simple hand tools.

SHIPFITTERS (CB) (Mechanical Draftsmen).—Do drafting for mechanical installations and plumbing, heating, and ventilating systems required in advanced base construction. Prepare specifications, drawings of mechanical devices, and scale drawings of machines from specifications. Make detailed drawings showing plumbing and pipe fitting.

SHIPFITTERS (CB) (Pipefitters and Plumbers).—Lay out, construct, install, maintain, and repair clay, concrete, and cast iron pipes used in water, sewer, steam, and fuel lines, stills and purifiers; and heating, ventilating, and refrigerating units. Do all types of pipefitting including cutting, bending, threading and hanging pipes. Maintain equipment such as toilets, grease traps, and pumps.

SHIPFITTERS (CB) (Riggers).—Rig all types of cable assemblies used in power shovels, cranes, bulldozers, pile drivers, hoists, derricks, and booms. Install the rigging necessary for pontoon assembly and tank mast erection. Erect "A"

frames, gin poles, derricks and booms. Construct simple suspension bridges. Rig special tackle to move or hoist heavy equipment and material.

SHIPFITTERS (CB) (Steelworkers).—Place, fit, weld, bolt, and rivet steel girders, columns, and plates used in the construction of advanced base facilities. Lay and repair pierced plank steel airplane runways. Build bridges, water and fuel storage tanks, docks, and steel pontoons.

SHIPFITTERS (CB) (Welders).—Operate oxyacetylene and electric arc welding equipment to cut, braze, and weld ferrous and nonferrous metals in the shop and field at advanced bases. Do all types of welding as may be required in salvage work, construction, repair of heavy equipment and in special jobs.

STOREKEEPERS (CB) (Stevedores).—Make up loading sheets, check hatch lists, and perform other clerical work in connection with loading and unloading vessels. Lay out pier, dock, or warehouse to receive cargo and assist in the preparation of cargo stowage plans.

WATER TENDERS (CB).—Install, operate, maintain, and repair high and low pressure boilers and equipment for the distillation and purification of water. Maintain and repair furnace brickwork, fuel pumps, condensers, evaporators, feed water heaters, and injectors. Perform plumbing or pipe fitting work in connection with the installation or maintenance of the above equipment. Make chemical tests to determine purity of water.

H. ADVANCEMENT IN RATING

With the great number of enlisted promotions taking place aboard ship, underway training and the division training officer have become important factors in enabling men to advance in rating.

The training program for advancement in rating has three objectives:

1. To develop in the men the skills necessary for each rating.
2. To impart the knowledge which is related to the skills.
3. To develop petty officer qualities, with emphasis on the quality of leadership.

The division training officer has at least four major functions in connection with the advancement of men:

1. He encourages outstanding men to prepare themselves to meet the qualifications of petty officers in order that there will be a pool of potential petty officers available at all times.
2. He gives exact information on the requirements for advancement.
3. He follows the procedures that have been set up for training and advancement.
4. He carries on training programs utilizing training courses that will assist men in preparing for advancement in rating.

Any enlisted man who meets the requirements and who qualifies under the existing policies of the Bureau of Naval Personnel can advance to a petty officer's rating. The following are the qualifications as set forth in the *Bureau of Naval Personnel Manual*, Section D, Chapter 5:

- (1) Before a man may be advanced in rating he must—
 - (a) Meet certain requirements as to length of service.
 - (b) Meet certain requirements as to marks in proficiency in rating and conduct.
 - (c) Have completed satisfactorily the Navy training course, where a suitable one is available for rating to which candidate is eligible for advancement.
 - (d) Have satisfactorily completed course at a service school when required;
 - (e) Qualify in the practical factors that are prescribed for his rating.
 - (f) Pass satisfactorily a technical examination.
 - (g) Be recommended by his commanding officer.
 - (h) The Bureau must have authorized advancements to the rating in question, either—
 - (1) By provisions of this manual, or special instructions contained in Bureau circular letters.
 - (2) By assignment of quotas to administrative commands;
 - (3) By order of commanding officer to fill vacancies.
 - (4) From an eligible list maintained in the Bureau.

It should be made clear to the men that the fact that they have qualified does not necessarily mean an *immediate* rating. However, men should be encouraged to try to qualify for the higher rating even though, because of a lack of vacancies in the complement, the rating may not actually be forthcoming at the moment.

Records should be kept of attendance at training courses and when a man has successfully completed a course, a certificate, signed by the Commanding Officer, should be issued to the man and an entry made in his service record. The division training officer will then recommend to the Commanding Officer that the man be considered for advancement.

The Commanding Officer, with the examining board, is the final authority on whether or not a man is qualified for advancement.

In general, the examining board for all petty officers, below chief, consists of three officers and, when practicable, at least one should have had two years' active naval service. An attempt is made to include on the examining board at least one officer with specialized knowledge of the duties of the rating for which the examination is being given. In examining members of the Hospital Corps, for example, at least one medical officer, when practicable, should be on the examining board. Examinations for advancement to all aerographer ratings should, if practicable, be conducted by an examining board of which at least one member is a qualified aerologist.

There is no lack of material for use in training for advancement in rating. All such material is listed in the *Catalog of Training Publications*, NavPers 16140. Of great value to the training officer is the *Training Officer's Guide for Enlisted Advancement*, NavPers 16325, and the *Advancement in Rating*

Tests, NavPers 16891, 16892, and 16893. Available also are manuals for study for advancement in every rating (e.g., MoMM2c, Ylc, etc.); basic manuals on various subjects, such as Diesel Engines, Gyroscopic Compass, etc.; and general training courses for nonrated men, petty officers, and chief petty officers. There is a special series of manuals on aviation subjects and a manual for each of the 17 aviation ratings.

I. CHARACTERS OF DISCHARGES ISSUED ENLISTED PERSONNEL

There are five different characters of discharge issued enlisted personnel discharged from the U.S. Naval Service, namely: (Art. D-9102, *BuPers Manual*).

- Honorable Discharge
- Discharge Under Honorable Conditions
- Undesirable Discharge
- Bad Conduct Discharge
- Dishonorable Discharge

1. *Honorable Discharge.** (Printed on white paper.) Honorable Discharges are given under the following circumstances: (Art. D-9103, *Bureau of Naval Personnel Manual*.)

(a) Expiration of enlistment. An Honorable Discharge is given to enlisted personnel discharged upon expiration of enlistment provided that during the enlistment the individual was not convicted by a general court-martial or more than one summary court-martial, and further provided final average marks are not below 3.0 in proficiency and 3.25 in conduct. (Art. D-9104, *Bureau of Naval Personnel Manual*.)

(b) Medical survey. An Honorable Discharge is given to an individual discharged upon recommendation of a Board of Medical Survey for disability incurred subsequent to enlistment or induction, whether or not incurred in line of duty provided not due to own misconduct, or for disability existing prior to enlistment or induction if not discovered until after completion of recruit training and provided not concealed at time of enlistment or induction. In both instances the minimum average marks must be not less than 3.0 in proficiency and 3.25 in conduct. An Honorable Discharge is also awarded to an individual discharged for disability incurred as a result of action against an organized enemy, provided his marks and record subsequent to the date of injury or disability would so entitle him. (Art. D-9105, *Bureau of Naval Personnel Manual*.)

(c) Special award. An Honorable Discharge is given an individual who has been awarded a Medal of Honor, decorated for heroism or distinguished service, or who has received a letter of commendation from the Secretary of the Navy, provided that subsequent to the act for which awarded or commended his record would entitle him to such a discharge. (Art. D-9115 (7)(e), *Bureau of Naval Personnel Manual*.)

2. *Discharge under Honorable Conditions.** (Printed on white paper.) A

See page 451.

Discharge under Honorable Conditions is given under the following circumstances: (Art. D-9103, *Bureau of Naval Personnel Manual*.)

(a) Expiration of enlistment (if marks below 3.0 in proficiency and/or 3.25 in conduct, or if convicted by a general court-martial or more than one summary court-martial). (Art. D-9104, *Bureau of Naval Personnel Manual*.)

(b) Medical survey (if marks below 3.0 in proficiency and/or 3.25 in conduct; or if disability was the result of own misconduct; or if disability existed prior to enlistment or induction and discovered while a recruit; or if disability existed prior to enlistment or induction and discovered subsequent to completion of recruit training when it is believed the individual concerned concealed the disability at time of enlistment or induction). (Art. D-9105, *Bureau of Naval Personnel Manual*.)

(c) Form "Y" (inactive duty). (Art. D-9103, *Bureau of Naval Personnel Manual*.)

(d) Convenience of government (when directed by Bureau of Naval Personnel or by special instructions). (Art. D-9106, *Bureau of Naval Personnel Manual* and Bureau of Naval Personnel Circular Letter 257-44.)

(e) An individual's own convenience (when directed by the Bureau of Naval Personnel). (Art. D-9106, *Bureau of Naval Personnel Manual* and Bureau of Naval Personnel Circular Letter 117-43 (corrected).)

(f) Dependency existing prior to enlistment (when directed by Bureau of Naval Personnel). (Art. D-9108, *Bureau of Naval Personnel Manual*.)

(g) Dependency arising since enlistment (when directed by Bureau of Naval Personnel). (Art. D-9108, *Bureau of Naval Personnel Manual*.)

(h) Minor enlisted without consent—under 18 at time of discharge (when directed by Bureau of Naval Personnel in individual cases or by special instructions). (Art. D-9109, *Bureau of Naval Personnel Manual* and Bureau of Naval Personnel letters Pers-66-HEB P14-4 of 22 Aug. 1944 and Pers-66-BJS QR8/P14-4 of 20 Sept. 1944.)

(i) Underage of authorized enlistment (when directed by Bureau of Naval Personnel in individual cases or by special instructions). (Art. D-9109, *Bureau of Naval Personnel Manual* and Bureau of Naval Personnel letters Pers-66-HEB P14-4 of 22 Aug. 1944 and Pers-66-BJS QR8/P14-4 of 20 Sept. 1944.)

(j) Unsuitability (when directed by Bureau of Naval Personnel in individual cases or by special instructions). (Art. D-9110, *Bureau of Naval Personnel Manual* and Bureau of Naval Personnel and Bureau of Medicine and Surgery Joint letter Pers-66-MSW and Bureau of Medicine and Surgery File No. P3-1/P19-1 (123)'40 dated 29 July 1944.)

(k) Inaptitude (when directed by Bureau of Naval Personnel in individual cases or by special instructions). (Art. D-9111, *Bureau of Naval Personnel Manual*.)

3. *Undesirable Discharge.* (This is an administrative character of discharge. It is printed on yellow paper.) The reasons for this character of discharge are the following:

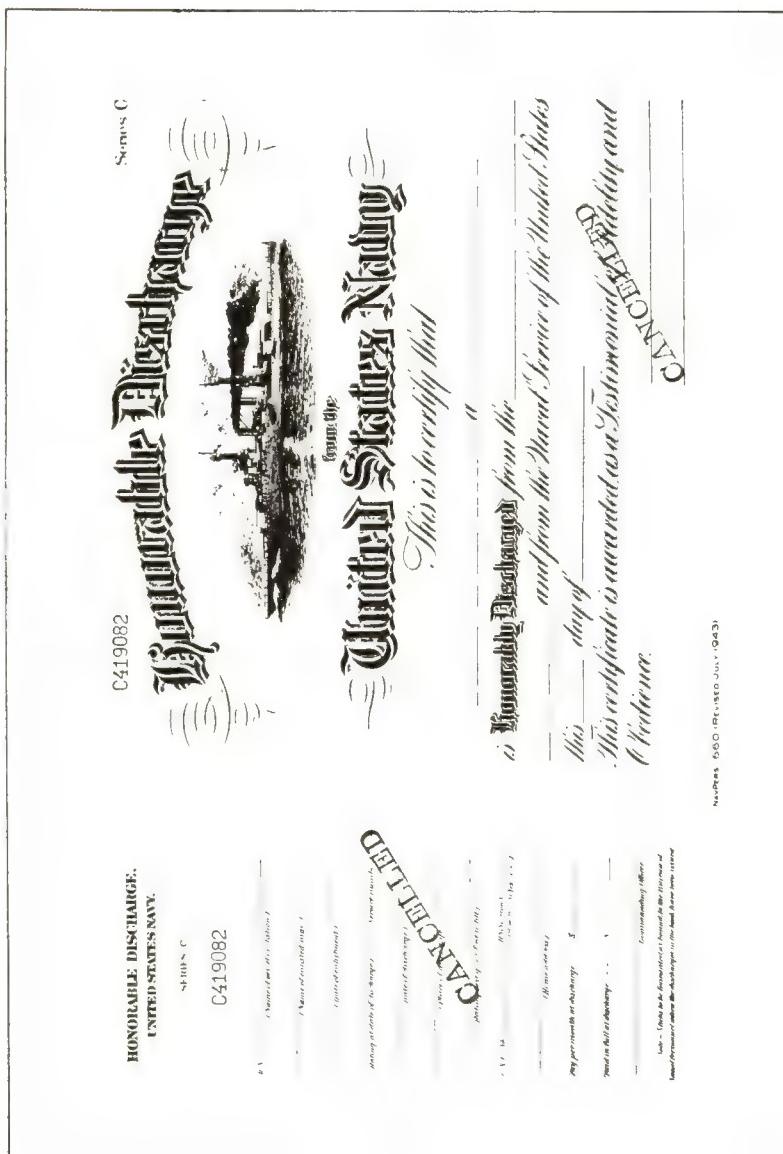


Figure 120. A copy of the Honorable Discharge certificate used by the United States Navy.

Enlisted as..... (Rate) _____

At..... (Date) _____ for..... years

Born..... (Date) _____ at.....

Qualifications.....

Ratings held.....

Certificates.....

Trade schools completed.....

Special duties for which qualified.....

Service (vessels and stations served on) or (served satisfactorily on active duty from

to.....)

CANCELLED

Rating at discharge..... {*Acting Permanent*} _____ (Service Number) _____

Character of service excellent. Final average.....

*U. S. N.
and Executive Officer.*

Height..... ft..... in. Weight..... lbs. Eyes.....

Hair..... Complexion.....

Personal marks, etc.,



Is physically qualified for discharge. Requires neither treatment nor hospitalization.

I certify that this is the actual print of the right index finger of the man herein mentioned.

*U. S. N.
and Medical Officer.*

Monthly rate of pay when discharged.....

I hereby certify that the within named man has been furnished travel allowance at the rate of cents per mile from..... to.....

and paid \$..... in full to date of discharge. (Amount)

Total net service for pay purposes..... years..... months..... days.

(Signature of man.) _____ *U. S. N.
and Disbursing Officer.*

Figure 121. Honorable Discharge blank (back).

<p>Navy Form 662B (G-4)</p>	
<p>UNITED STATES NAVY</p>	
<p>DISHONORABLE DISCHARGE</p>	
<p>THIS IS TO CERTIFY That _____</p>	
(Service number)	United States Navy [Name in full]
(Rating—do not abbreviate)	United States Naval Reserve
has this day been discharged from	and the
<p>U. S. Naval Service, BY REASON OF SENTENCE OF A GENERAL COURT MARTIAL.</p>	
<p>Dated this _____ day of _____, 19_____, at _____</p>	
<p>U. S. N. Commanding.</p>	

Figure 122. A copy of the Dishonorable Discharge blank used by the United States Navy.

Authority for discharge
 Enlisted as on at for
 Born on at
 Qualifications
 Ratings held
 Certificates
 Service schools completed
 Special duties for which qualified
 Service (vessels and stations served on)

 Rating at discharge { Acting. Permanent. (Service number)
 Marital status , U. S. N.
 and Executive Officer.

DESCRIPTIVE LIST

Height feet inches. Weight pounds. Eyes
 Hair Complexion Personal marks, etc.



I HEREBY CERTIFY that I have examined the man herein named and find that he—

Does require treatment or hospitalization

I CERTIFY that this is the actual print of the right index finger of the man herein named

, U. S. N.
and Medical Officer.

Monthly rate of pay when discharged

I HEREBY CERTIFY that the man herein named has been paid \$ in full to date of discharge, including, if discharged after prison, transportation in kind from to Total net service for pay purposes years months days.

(Signature of man) , U. S. N.
and Disbursing Officer.

Figure 123. Dishonorable Discharge blank (back).

(a) Unfitness (in accordance with instructions existing at the time). (Art. D-9112, *Bureau of Naval Personnel Manual*.)

(b) Desertion without trial (when authorized by Bureau of Naval Personnel). (Such discharges are effected when the statute of limitations has run its course.) (Art. D-9113, *Bureau of Naval Personnel Manual*.)

(c) Trial and conviction by civil authorities (when authorized by Bureau of Naval Personnel). (Art. D-9113, *Bureau of Naval Personnel Manual*.)

(d) Fraudulent enlistment (when authorized by Bureau of Naval Personnel). (Art. D-9113, *Bureau of Naval Personnel Manual*.)

4. *Bad-Conduct Discharge.* (Printed on yellow paper.) A Bad-Conduct Discharge may be given in accordance with sentence of a summary court-martial or a general court-martial. (Art. D-9114, *Bureau of Naval Personnel Manual*.)

5. *Dishonorable Discharge.* (Printed on yellow paper.) A Dishonorable Discharge may be given in accordance with a general court-martial sentence only. (Art. D-9114, *Bureau of Naval Personnel Manual*.) (A discharge which results from a conviction by a general court-martial on a charge of desertion in time of war, deprives an individual of his Federal citizenship rights.)

Enlisted personnel discharged with an Undesirable, Bad-Conduct, or Dishonorable Discharge are not entitled to any type of naval discharge button.

*Enlisted personnel honorably discharged are entitled to receive an Honorable Discharge Emblem, U. S. Navy or U. S. Naval Reserve, as applicable, and in addition thereto an Honorable Service Lapel Button. (Arts. A-4010 and D-9115(6), *Bureau of Naval Personnel Manual*.)

Enlisted personnel discharged "Under Honorable Conditions" are entitled to an Honorable Service Lapel Button. (Art. A-4010, *Bureau of Naval Personnel Manual*.)

The Honorable Discharge Emblem is a badge of honor worn on the right breast of all outer uniform clothing by naval personnel honorably discharged from the naval service on or after 7 December 1941. It indicates at a glance that the wearer, if an officer, has been permanently separated from the naval service under honorable conditions or, if an enlisted person, has been granted a character of discharge which carries with it the privilege of retaining and wearing the naval uniform after discharge.

This emblem is of the same design as that of the Honorable Service Lapel Button and is golden yellow on a background matching in color the uniform on which it is worn.

Honorable Service Lapel Buttons are available for issue at naval training stations, hospitals, receiving stations, and other shore activities to officers and enlisted personnel at the time of their discharge, release from active service, or separation from the naval service on or after 9 September 1939, during the period of the war, and until a subsequent date to be determined by the Chief of Naval Personnel under certain conditions (see *Bureau of Naval Personnel Manual* A-4010).

Honorable Service Lapel Pins are available to personnel of the Women's Reserve following discharge or release from active duty. The stock of these pins is kept only in the Bureau of Naval Personnel and applications for them must, therefore, be submitted to the Chief of Naval Personnel.

Honorable Service Lapel Pins are identical in design with Honorable Service Lapel Buttons but are with pin-back rather than post-back.

J. CARE OF THE UNIFORM

Necessity for care of uniform and equipment. The longest service of the various articles of the prescribed uniform can be obtained only by proper care and maintenance. The following information is presented in order that the useful life of uniforms and equipment may be prolonged, and also that they may be worn with the justifiable pride which should distinguish the naval or military uniform.

General care. No matter how well fitting a uniform, and especially the coat, is when new, it will not continue to look its best nor keep its shape unless it is carefully put on and kept buttoned. The carrying of large or heavy objects in the pockets will speedily destroy the shape of the best coat. Uniforms should always be kept on hangers when not in use.

To fold a coat. When folding a coat, spread it out, lining down, on a table and turn up the collar. Straighten out the sleeves and fold each side from the lapel notch, bringing the lower corners to the center seam. Fold the coat once on the center seam. If the container is not sufficiently large to allow the coat to be packed at its full length, turn the sleeves up at the elbow before folding the coat.

Moths. Frequent brushing and exposure to sunshine and fresh air will effectually prevent moths. If uniforms are to be put away for a long time and left undisturbed they should first be thoroughly cleaned and then packed away with camphor balls, naphthalene, cedar wood, or balls of cotton saturated with turpentine.

To remove oil or grease from blue uniforms. Oil or grease stains can be removed from blue uniforms by soaking a piece of blue cloth in chloroform, carbon tetrachloride, petroleum benzine, benzol, or acetone, and rubbing the spot briskly. The stain will be washed out. The solvent will rapidly evaporate.

To remove kerosene. Washing in a solution of warm soapy water will remove kerosene stains.

To remove stains from blue uniforms. Paint stains, while still fresh, can be removed by use of the method given above for removing oil or grease. Old and hard paint stains are difficult to remove and oftentimes impossible. The best treatment for old paint stains is to rub them hard with a piece of blue cloth saturated with turpentine.

Paraffin, wax, etc. Paraffin, wax, or similar stains can be removed by placing blotting paper over the spot and applying a hot iron to the blotting paper. Continue this, using clear blotting paper, until the spot is removed.

Iodine stains. Iodine stains can be removed by applying a solution of "Hypo" (sometimes called "anticolor") used in photography, or sodium hyposulphite, and then rinsing thoroughly with water. It may also be removed by using ordinary laundry starch. Immerse the stained part in the starch and boil; it first turns blue then disappears.

Chocolate. Cover chocolate stains with borax and wash with cold water. Then pour boiling water on the stain and rub vigorously between the hands. When dry, sponge with a little naphtha, chloroform, or benzine.

To remove rust, ink, or fruit stains from white uniforms. Rust, ink, or fruit stains can be removed from white uniforms by soaking the stained part in a solution of oxalic acid; or by putting some powdered oxalic acid or sodium or potassium acid oxalate on the stain, which has previously been moistened with water, and rubbing with a piece of white cotton or linen. The stain will dissolve and can then be washed out with water. CAUTION: Oxalic acid and

its soluble salts are very poisonous, and care should be taken in handling them.

Care of gold lace. Gold lace (braid) will rapidly tarnish and deteriorate if left in contact with or hung near any substance containing sulphur, such as rubber or ordinary manila and kraft wrapping paper.

To remove tarnish from gold lace. Gold lace can be cleaned by dipping it in a solution of potassium cyanide and rinsing it thoroughly with water. CAUTION: Potassium cyanide is a powerful poison, and extreme care must be exercised when using it. *Never under any consideration use it when hands bear cuts or scratches.* In any case, it is far safer to have an experienced tailor clean gold lace.

Mildew. Cold water will remove fresh mildew stains. Old mildew stains must be bleached out.

To clean buttons. Buttons sometimes turn green when the gold plating is worn off and the copper base becomes covered with green copper carbonate due to exposure to moist air. This can be removed by first rubbing the buttons gently with acetic acid or any substance containing this acid (such as vinegar or Worcestershire sauce) and then washing them in fresh water and drying.

To remove shine from serge uniforms. The spot to be treated should be steamed by laying a wet cloth over it and pressing with a hot iron, and then rubbing it very gently with a piece of "00" sandpaper or emery cloth. This should be done by a tailor.

To repair a cut or a tear. A cut or a tear in a serge or cloth uniform can be repaired by being rewoven with threads drawn from the material in another part of the garment. Reweaving must be done by an experienced tailor. This process is rather expensive, but a cut so repaired cannot be detected after being rewoven.

To remove a singe mark. A light singe mark on a blue serge or cloth uniform should be rubbed vigorously with the flat side of a silver coin. This remedy, however, is not effective in cases of bad singeing or scorching.

Embroidered cap devices. Cap devices and other embroidered insignia may be kept new and bright by scrubbing them occasionally with a stiff brush (an old toothbrush is good) dipped in a solution of ammonia and water. This should be done as soon as there are any signs of tarnishing or corrosion for after corrosion has been allowed to continue for some time, the device cannot be restored to its original condition.

Metal cap devices. The gold part of a cap device can be cleaned by washing it with soap and water, or by rubbing it with a soft polishing cloth; the sterling silver part can be cleaned with any silver polish.

K. DEVELOPING LEADERSHIP

The following letter was written to his ship's officers by the Commanding Officer of the U.S.S. *Clark* on the occasion of its commissioning. Here will be found helpful suggestions for the young officer and many hints on the all-important subject of naval leadership:

At this time when we are commissioning a new ship and all starting fresh on a clean slate practically strangers to one another, it may be of value to you to have some idea of the point of view, likes and dislikes, desires and peculiarities of your Commanding Officer.

Accordingly I have set forth below a few observations, some original, some not, in the hope that they may give you a helpful insight into my philosophy of naval life.

A ship cannot be imagined without organized leadership. It is obvious that the first essential in any military body is an established system of controlling men. We have the benefit of the system as it exists in the Navy. We are backed up by all the machinery of law, regulations, and custom. They help a lot, but such things are only externals—means to an end. Obedience itself is not the object. It is only a step toward the end—a necessary step, but it should be a demonstration of willingness and not an evidence of compulsion. The end sought is the coordination of individual strength to produce the maximum concentrated effort toward the accomplishment of the object in view.

We shall never be leaders as long as our men are giving only the measure of obedience *compelled* by law. We shall be leaders only when our men look up to us with confidence, when they are anxious to know our wishes, eager to win our praise, and ready to jump at a word from us in the execution of our orders regardless of whether they think them right or wrong.

How is this to be done? How can we arouse this sentiment in the men of this ship? The answer is simple, but the practice is difficult.

By setting the example. By practicing what we preach.

In the morning when we appear on deck let us think what we would like every man in the crew to be and then let us try to be that man ourselves. Men unconsciously imitate their officers. We stand before them constantly as examples. If we are military, smart, decisive in our bearing, they will brace up and try to be like us. But if we are sloppy, careless, and seem congenital sufferers from that “tired feeling” no amount of nagging will make the men otherwise. If we are active, energetic, enthusiastic, and perhaps best of all, *cheerful*, our example will be contagious.

A ship, like a navy, is as good as the men in that ship—*no better*.

Officers can guide, can influence, can mould men. But whether their efforts are successful depends upon the officers setting the very best example in everything and of *practicing what they preach*. There is scarcely anything more infamous, more destructive to discipline and loyalty, than the officer whose philosophy of life is based on the principle of “Don’t do as I do, do as I say.”

Know the practical business of going to sea. The examination papers of many officers reveal the fact that while they are able to make a diagram of a radio set or a sketch of a Diesel engine, they are often deplorably deficient in elementary seamanship, in rules of the road, the different kinds of buoys, and how to lower or hook on a boat in a seaway. Whatever your other technical qualifications, you must be a good sailorman. I want you to know more about

every man and everything in your department or part of the ship than any man in it. Know where the fire plugs are, the spanners, nozzles, magazine floods, watertight doors, and how to handle them. Know where everything is stowed. I want every officer in the ship personally and without assistance to be able to veer chain, let go an anchor, put on a stopper, and heave in. In case of fire, collision, or other emergency, lead your men through knowledge acquired beforehand. Be *able* to take charge, and when you are in charge, then *be* in charge. You know theoretically far more than any enlisted man. The same is true of all graduates of the Naval Academy. Yet you have seen, as I have seen, a lot of officers standing around like sailors' dummies, afraid they might be mistaken.

If your powers of general observation are not of the best, develop them by conscientious training. When you go up topside or walk about the decks, learn instinctively to look around. Drill yourself constantly until you notice without effort, and make a mental note of such things as the direction of the wind, whether or not it is freshening or the sky becoming overcast, the absence of the admiral's flag from the ship where it usually flies, that some ship has gone alongside the tanker, that another is painting or preparing to weigh, etc. And in this process don't forget the *Clark*. If you see lines or swabs hanging over the side or the colors are foul, don't pass it all up because you are not on duty —*do* something about it. We are all on duty 24 hours a day, although not necessarily at all times engaged in executive duty. And in this connection if you return aboard at 0311 and fail to see the O.O.D., don't turn in and forget it because you're not on watch and it's not your pigeon anyhow. If you do, you're infinitely more remiss in your duty than was the O.O.D. in being in the fireroom or on the bridge over a bowl of coffee.

It is *not* how much ability an officer *has*, but *how well he uses* what he *does* have that determines his value to the Navy.

A man's character expresses itself in everything he does.

It is said that "responsibility makes cowards of us all." How many of us are but too inclined to criticise and hold forth on what *we* would do were we in so-and-so's billet. Yet when we actually do step into his shoes and shoulder the responsibility for the success or failure of operations which seemed so simple from the outside looking in, we find this responsibility so discouraging to our dash and conceit that we only too frequently follow the path of least resistance—excessive caution.

Any fool can criticise. Most fools do.

Don't nag your men; don't neglect them; don't coddle them; don't play the clown.

Almost any man with brains can run a reasonably well-designed piece of machinery. But it takes a lot more than brains successfully and continuously to run the human machine.

In matters of personal bearing, uniform, etc., I shall expect you to be guided by my example. There are certain practices to which I strongly object. They are:

1. Failing smartly to return salutes rendered you.
2. The wearing of unstarched collars with blue uniforms in port.
3. The wearing of dirty, spotted, torn, or frayed uniforms at any time except when working on greasy machinery.
4. Lounging in the wardroom in dungarees or out of uniform.
5. Pacing or lounging on the weather decks with hands in trouser pockets.
If your hands are cold put them in your blouse or jacket side pockets.
It does not look unseamanlike and that is what the jacket pockets are for.
6. Chewing gum at any time in uniform.
7. Leaning over or against the life lines or against anything on the weather decks thereby telling the world that one is a victim of that "tired feeling."
8. Needing a shave after 0800.
9. Any kind of cheap, vulgar, uncultivated talk, especially to or in the presence of an enlisted man.
10. Pencils and fountain pens in sight in uniform outside breast pockets.
11. He who suddenly bursts into a frenzy of energy and zeal when unexpectedly he finds himself under the eye of the Captain.

At sea in matters of uniform take your cue from me.

Avoid, as you would the plague, hostile criticism of authority, or even facetious or thoughtless criticism that has no hostile intent. Our naval gunnery instructions state that "destructive criticism that is born in officers' messes will soon spread through the ship and completely kill the ship spirit."

Admiral Lord Jervis said: "Discipline begins in the wardroom. I dread not the seamen. It is the *indiscreet* conversations of the officers and their *presumptuous* discussions of the orders they receive that produce all our ills."

HEWLETT THEBAUD, Comdr., U.S.N.

GLOSSARY

- Abaft:* a term used to describe the position of one object relative to another, in which the object referred to is farther aft than the other. For example: the mainmast is abaft the foremost.
- Abandon ship:* an order for all hands to leave ship.
- Abeam:* in a direction at right angles to the centerline, and refers to an object outside the ship.
- Ahead:* alongside, or bearing 90 degrees from ahead.
- Accommodation ladder:* a flight of steps by which passage is afforded between a small boat and a ship.
- Adrift:* out of place or loose from moorings.
- Aft:* at, near, or in the direction of the stern.
- Afters:* a term, usually part of the name, used to describe an object abaft a similar object. As: after turret, after deckhouse.
- Ahoys:* the term used to hail a boat or vessel.
- Alive:* alert.
- All hands:* the entire ship's company.
- Aloft:* above the upper deck; overhead.
- Alongside:* beside a pier or vessel.
- Amidships:* usually in the line of the keel, but sometimes halfway between bow and stern; usually corrupted to "midships."
- Anchor lights:* white lights visible all around the horizon and displayed by a vessel at anchor.
- Anchor's aweigh:* said of an anchor when it has been heaved up just clear of the bottom.
- Annunciator:* a signal device used to transmit orders to engine and firerooms.
- Astern:* the bearing of an object 180 degrees from ahead; behind the vessel; abaft the stern.
- At anchor:* a ship is said to be at anchor when she is held within a definite area by means of an anchor.
- Athwart:* at right angles to the centerlines of a vessel.
- Athwartship:* in a direction at right angles to the centerline.
- Avast:* an order to stop or cease hauling.
- Awash:* used when a vessel is so low in the water that water is constantly washing aboard in quantities.
- Aye, aye, sir:* a term used by a subordinate to his senior in acknowledgment of an order, signifying that it is understood and will be obeyed. Not to be confused with: *Yes sir:* an affirmative answer made in reply to a senior's question. *Very well:* signifies assent and is made only by a senior to a junior.
- Back:* to work the engines in an astern direction to back the ship or make it go astern; said of the wind when it changes direction in a counter-clockwise direction.
- Ballast:* heavy weights, placed in the lower hold of a vessel to increase stability by lowering the center of gravity.
- Barbette:* a heavily armored cylinder extending from the armored upper part of a turret down to the lowest armored deck and within which the turret rotates.
- Barge:* a ship's boat designated for the use of flag officers, usually referred to as the "Admiral's Barge."
- Barnacles:* small shellfish which are found attached to the sides of vessels, piers and driftwood.
- Batten down:* to close or make watertight; to secure cargo.
- Battle bridge:* an open platform found on some ships for use of the Commanding Officer during engagements with enemy aircraft.
- Beam:* the greatest width of a vessel; athwartship timber or member.
- Belay:* to make fast a rope, to cease; to rescind an order.
- Below:* beneath the deck or position.
- Bend:* to make fast; for example, to bend a cable is to make it fast to the anchor; a knot used in joining two lines.
- Berth:* an area or position suitable for a vessel to tie up or to anchor.
- Bight:* any part of a rope inside the ends; a cove or indentation in the coastline.
- Bilge:* the curved part of a ship's hull where the sides and flat bottom meet.
- Bilge keels:* keels at the turn of the bilge that offer resistance to the rolling motion of a ship.
- Bilge water:* water which collects by seepage or leakage in the bilges of a ship.
- Bilged:* a vessel stove in at or near the bilge or curved part; also to be dropped from a midshipmen's school for academic reasons.
- Billet:* an allotted place to sleep. It may also refer to an individual's general duties aboard ship.

- Binnacle:* a box and stand made of brass or some other nonmagnetic metallic material and used as a container for the compass.
- Binnacle list:* a sick list; includes the names of those excused from duty by the medical officer.
- Bitter end:* the last end of a rope or the last link of a cable that is doing important work.
- Bitts:* a pair of iron or wooden heads on board ship set vertically in the deck to which mooring or towing lines are made fast.
- Black gang:* that part of the ship's company which comprises the engineer's force.
- Blinker:* a set of lights at the masthead or on the end of either yardarm, connected with a telegraph key; by means of this device signals are sent in International Morse Code.
- Blister:* a bulge built in a man-of-war's side as a protection against torpedoes, and capable of being flooded or pumped out.
- Boat:* as used by seamen the term applies to small craft and not to a vessel.
- Boat boom:* a spar swung out horizontally and at right angles from the side of a vessel at anchor and to which small boats are secured.
- Bollard:* an upright wooden or iron post on a dock to which hawsers may be secured; sometimes called a "nigger head."
- Booby hatch:* a small opening in the deck forward or aft of the main hatches, used to facilitate communication below or to the deck.
- Boom:* a spar having many uses; the foot of a fore and aft sail is laced to a boom; boats are secured to boat booms; cargo booms are used for handling cargo; a line of logs may be used to form a floating chain to obstruct the passage of boats or restrict a quantity of logs to a certain area.
- Bos'n's chair:* the board on which a man sits when swung aloft or over the side to work.
- Bow:* the front end or head of a vessel.
- Bower anchors:* two heavy anchors carried in the forward part of the vessel, and ordinarily used in anchoring.
- Breaker:* a small water-cask used in a ship's boats; surf.
- Break out:* get out, take out of stowage.
- Bridge:* a raised athwartship platform from which the vessel is usually steered and navigated.
- Brig:* the ship's prison.
- Bright work:* all brass work that is kept polished; also unpainted woodwork that is kept scraped.
- Broadside:* the side of a vessel above water; the simultaneous firing of all guns on one side of a warship.
- Brow:* a portable gangway from a vessel to a pier, wharf, or float.
- Bulkhead:* transverse or longitudinal partition separating portions of a ship.
- Burdened vessel:* the vessel required by the Rules of the Road to keep clear of another vessel.
- Bulwark:* the light plating or wooden extension of the ship's sides above the upper deck.
- Bunk:* a built-in bed aboard ship.
- Buoys:* floating beacons, moored to the bottom, which by their shape and color convey valuable information as to position.
- Burgee (bur'jee):* swallow-tailed flag used as a distinguishing pennant.
- Cabin:* the quarters of the Captain; the enclosed space of a decked-over small boat.
- Cable:* a heavy rope or chain, generally used in reference to chain or rope bent to the anchors.
- Call:* the boatswain's pipe.
- Camel:* a float very stoutly constructed and used as a fender to keep a vessel off a wharf or other vessel.
- Capstan:* a vertical barrel situated on the forecastle and geared on the windlass; used for heaving in anchors and hawsers.
- Carry away:* to tear loose, break; part, or wash overboard.
- Carry on:* an order to resume work or duties after an unscheduled interruption.
- Cast:* to throw; to throw a vessel to port or starboard in getting underway by the use of the rudder, or rudder and engines.
- Cast off:* to let go a line.
- Caulk (cork) off:* to sleep.
- Chafe:* to wear the surface of a rope, spar, or boat by rubbing.
- Chafing gear:* a guard of canvas or rope around spars or rigging to take the wear.
- Chains:* platforms forward extending out over the water on either side of a ship and used by the leadsmen in taking soundings.
- Charley Noble:* the galley smoke-pipe.
- Chart:* a map for the use of navigators.
- Chart house:* the compartment used by the navigator for his work.
- Check:* to ease off slowly; to stop a vessel's way gradually by means of a line made fast to a dock or anchor on the bottom.
- Chock-a-block (two-blocked):* the situation when two blocks of a tackle are drawn as close together as possible; full.

- Chock*: an iron casting, with jaws, which serves as a lead for lines to a wharf or other vessel; a convenient block of wood for supporting boats, weights, etc.
- Chow*: food.
- Cleat*: a fitting of wood or metal with two projecting horns around which ropes are made fast.
- Close aboard*: near; in close proximity to.
- Coaming*: the raised framework about deck openings and cockpits in open boats; used to prevent the entry of water.
- Collision bulkhead*: a partition in the forward part of the ship, constructed of sufficiently heavy material to stand the great strain if the bow should become damaged.
- Colors*: a ship's national flag; the ceremony which takes place when the flag is raised at 0800 and lowered at sunset.
- Commission pennant*: the official pennant flown at the main truck of a man-of-war when in command of a commissioned officer of less than flag rank.
- Companion ladder*: a ladder connecting the quarter-deck and the officers' quarters.
- Companionways*: sets of steps or ladders leading from one deck level to another.
- Compartments*: spaces below decks between bulkheads.
- Conning*: directing the steering of a ship by orders to the steersman.
- Conning tower*: a heavily armored structure, just forward of and slightly below the bridge, housing all control apparatus on the bridge.
- Country*: the space adjacent to and used for access to a compartment or quarters as, the cabin, wardroom, and head country.
- Course*: the direction steered by a vessel, expressed in degrees.
- Coxswain (coxswun)*: the enlisted man in charge of a small boat and usually serving as steersman. A third class petty officer rating.
- Crossing the line*: crossing the earth's equator.
- Crow's nest*: a lookout station consisting of a platform usually on the foremast.
- Cut-of-the-jib*: general appearance of a vessel; sometimes applied to the appearance and mannerisms of a person.
- Davits*: (pronounced *da'vets*) small cranes that project over the ship's sides and are used for hoisting and lowering boats.
- Davy Jones' locker*: the bottom of the sea.
- Day's duty*: a tour of duty on shipboard lasting 24 hours.
- Dead ahead*: directly ahead on the extension of the centerline of the vessel.
- Dead in the water*: said of a ship when the ship has no headway or sternway in the water.
- Dead light*: a heavy round glass lens set flush and permanently into decks and bulkheads for admitting light or permitting observation.
- Deck*: corresponds to the floor of a building.
- Derelict*: abandoned floating vessel at sea.
- Dinghy* (pronounced *dīngy*): a small handy boat, 16 to 20 feet in length; may be propelled either by oars or sail. (Nickname: "Dink".)
- Dip*: a position of a flag when it is hoisted about two-thirds way up; to lower a flag part way, and then hoist it again as a mark of courtesy to a passing vessel.
- Displacement*: the weight of the water displaced by a vessel; this weight is equal to the weight of the vessel.
- Ditty-bag*: a small canvas bag used by sailors to stow small articles of gear.
- Dogs*: small, bent metal fittings used to secure watertight doors, hatch covers, manhole covers, etc.; also metal rods which are driven into blocks at the bottom of a dry dock to prevent blocks from floating.
- Dog watch*: one of the 2-hour watches from 1600 to 2000. The first dog watch is from 1600 to 1800 and the second dog watch is from 1800 to 2000.
- Dory*: a small flat-bottomed boat with a sharp sheer, especially seaworthy and used chiefly by fishermen.
- Double bottoms*: watertight subdivisions of a vessel next to the keel and between the outer and inner bottom, protecting the ship in case of damage to the outside plating.
- Double up*: to double a vessel's securing line when she is moored to a dock.
- Draft*: the depth of water from the waterline to the vessel's keel.
- Drift lead*: an ordinary sounding lead and line that is dropped over the side of the ship to indicate any dragging of the vessel.
- Dungarees*: blue overalls used for work.
- Engine speed indicator*: a device found on the bridge and in the engine room which indicates the number of revolutions per minute the propeller shafts are making.
- Ensign*: a flag, the emblem of a vessel's nationality; a junior officer of the Navy.
- Eyes*: the very forward part of a ship; on the weather deck in the bow.
- Fairway*: an open channel, mid-channel.
- Fantail*: the space in the overhang of the stern; the after section of the main deck.
- Fast*: to make fast is to secure.



Figure 124. Parts of a ship.

- Fathom:* 6 feet; used as a measure of the depth of water.
- Fathometer:* an electrically-operated apparatus used for measuring automatically the depth of the water.
- Feeling the way:* to proceed slowly, sounding the depth of the water and with caution.
- Fender:* a device of canvas, wood, or rope, used over the side to take the shock of contact between ship and wharf or other vessel when alongside.
- Fend off:* to prevent touching by pushing off in coming alongside, or in leaving a pier or vessel.
- Field day:* a day set aside for scrubbing and general cleaning aboard ship.
- First lieutenant:* the commissioned officer having charge of the cleanliness, efficiency and general upkeep of a vessel's hull. This is a duty and not a rank.
- Flag officer:* an officer having the rank of Commodore or higher, so called because he is entitled to fly his personal flag which indicates his rank.
- Flagstaff:* the small vertical spar at the stern to which the ensign is hoisted while at anchor.
- Flogging:* a form of punishment used in the early Navy, now abolished by law.
- Flood tide:* that period in the tidal current when the water is flowing toward the land.
- Flotsam:* floating goods or wreckage.
- Foggy:* an increase in pay due to length of service.
- Fore and aft:* in a direction parallel to the centerline.
- Forecastle (fo'c'sle):* the upper deck forward of the foremast and included in the bow area.
- Foremast:* the first mast of a ship abaft the bow.
- Foretop:* a heavy structure supported by the foremast in which fire control equipment is housed.
- Forward:* in the direction of the bow, or fore part of the vessel.
- Foul:* jammed; the opposite of clear.
- Foul anchor:* said of an anchor when the chain is twisted about it.
- Freeboard:* the distance from the main deck to the water.
- Gadget:* (also gilguy) a convenient name given to objects whose real names are not known—considered a lubberly expression.
- Gaff:* a small spar abaft the mainmast that extends at an angle of about 40 degrees with it.
- Galley:* the ship's kitchen.
- Gangplank:* a temporary bridge connecting the ship with the shore.
- Gangway:* a passageway or ladder up a ship's side; an order to stand aside and get out of the way.
- Gear:* a general term for a collection of spars, ropes, blocks, and equipment.
- General quarters:* a general drill at which the entire ship's company exercises at battle stations.
- Gig:* a ship's boat designated for the use of the Captain.
- Glass:* a mariner's name for a barometer or a spyglass.
- Go adrift:* to break loose.
- Grapnel:* a small anchor with several arms used for recovering lost articles or bodies of drowned persons from the bottom, or for anchoring dories or skiffs.
- Gratings:* wooden or iron openwork covers for hatches, bunker holes, etc.
- Graveyard watch:* the middle watch, 2400 to 0400, so called because of the number of disasters that occur at this time.
- Ground tackle:* a term used to include all anchor gear.
- Guess warp:* a line at the outer end of a boat boom, used for securing a boat to the boom; a hauling line laid out by a boat.
- Gunwale (gunnel):* the upper edge or rail of a vessel or boat's side.
- Guy:* a steadyng rope used to support a spar in a horizontal or inclined position.
- Hail:* to address a nearby vessel. Also, a man or vessel hails from his or her home port.
- Half-mast:* the position of a flag when hoisted half-way, used as a mark of respect for the dead.
- Halyards or halliards:* ropes used for hoisting flags and sails.
- Hand:* a member of the ship's crew. To "bear a hand" is to hurry up.
- Hand lead:* a lead weighing from 7 to 14 pounds, attached to a lead line and used for measuring the depth of water.
- Handsomely:* to ease off on a line gradually; to execute a deliberate, careful maneuver with a vessel.
- Hash mark:* a red, gold, or blue diagonal stripe across the sleeve of an enlisted man signifying the number of previous enlistments, one hash mark for 4 years of active service.
- Hatches:* deck openings providing vertical access to a space below decks.
- Haul:* to pull. The wind hauls when it changes direction clockwise, but the most popular term for this is veering.
- Hawsepipes and hawse holes:* the iron castings in the bow through which the anchor chains run are the hawsepipes, the openings the hawse holes.
- Hawser:* a heavy line, 5 inches or more in circumference, used for heavy work such as towing or mooring.
- Head:* the compartment having toilet facilities.
- Head room:* the clearance between decks.
- Heads up:* a warning to look out or clear a passageway.

- Headway:** when the vessel is moving forward (ahead).
- Heave:** to throw; exert a pull on a line; the rise and fall of a vessel at sea.
- Heave away:** an order to start heaving on a capstan or windlass, or to haul on a line.
- Heave short:** heave in on the anchor chain until the vessel is nearly over the anchor but with little more chain out than the depth of the water.
- Heave the lead:** take a sounding with the hand lead.
- Heave to:** to bring the vessel's head or stern to the wind or sea and hold her there by the use of the engines and rudder.
- Heaving line:** a light line having a "monkey fist" or small weighted bag at its end to aid in throwing. It is thrown to a pier or another vessel as a messenger for a hawser.
- Heel:** to list over; a vessel turns on her heel when she turns in a short space.
- Hit the deck:** a phrase used in breaking a naval crew out of their hammocks; at reveille the same as "Rise and shine."
- Hoist:** a display of signal flags at the yardarm; to elevate an object or piece of cargo.
- Hold:** a large lower compartment of a vessel for the stowage of ballast, cargo, and stores.
- Holiday:** an unpainted, unvarnished, or unfinished spot on the spars or about the vessel.
- Holystone:** a brick of sandstone used for cleaning decks and whitening decks by hauling it back and forth; small ones used around corners are called "prayer books."
- House:** to stow or secure in a safe place.
- Hug:** to keep close.
- Hull down:** said of a vessel when it is so far distant that only its masts are showing above the horizon.
- Idlers:** members of a ship's company having no night watches.
- Inboard:** toward the centerline in relation to the sides of the vessel.
- Inshore:** toward the land.
- Irish pennant:** an untidy loose end of a line.
- Jack:** the flag similar to the union of the national ensign; a device for moving heavy pieces of equipment or cargo.
- Jackstaff:** a small vertical spar at the bow of the ship from which the jack is flown while at anchor.
- Jacob's ladder:** a ladder made of rope used over the side and aloft.
- Jump ship:** to leave a ship without permission; to desert.
- Keel:** the timber or bar running the entire length of the hull from stem to sternpost and forming the backbone of a vessel from which rise the frames or rigs, stems, and sternpost.
- Keelhaul:** an ancient form of punishment in which a man was hauled down one side of the vessel, under the keel, and up the other side; to reprimand.
- Knock off:** to stop doing something; especially to stop work.
- Knot:** a measure of speed, not distance, equal to one nautical mile (6080 ft.) per hour; a tie or fastening formed with a line.
- Ladder:** a stairway of metal, wood, or rope.
- Lanyard:** a rope made fast to an article to secure it; for example, knife lanyard, bucket lanyard, etc.
- Lash:** to secure by binding closely with line or small stuff.
- Lashing:** the rope used to lash.
- Lay:** a preliminary order meaning "to go," for example, lay aloft, lay aft, lay forward, lay below, etc.; the direction of the twist of the strands of a rope.
- Lead line:** the line which is attached to the lead used in taking soundings.
- Leadsman:** the seaman detailed to the chains for heaving the lead in taking soundings.
- Lee:** away from the direction of the wind.
- Leeward:** (Lu'ard) the direction away from the wind.
- Lend a hand:** to help.
- Liberty:** permission to be absent from the ship or station for a short period of time.
- Lie to:** a vessel is said to lie to when the anchor is up, when not aground, or fast to the shore but with no way upon her.
- Lighter:** a small vessel used for discharging or loading vessels anchored in harbors.
- List:** the leaning of a vessel due to greater weight upon one side.
- Locker:** a small stowage compartment either in the form of a chest or a closet.
- Log:** a device used to measure the ship's speed through the water; to make an entry in a ship's logbook; also used frequently instead of logbook.
- Logbook:** a book containing the official record of a ship's activities along with other pertinent data relative to the ship's navigation; it is a complete chronological history of the ship from the time she is first commissioned until she terminates her seagoing career.
- Lookout:** the man stationed above decks for observing and reporting objects seen.
- Lucky bag:** a locker or compartment into which pass stray articles found about a naval vessel.
- Main deck:** the highest complete deck extending from stem to stern and from side to side.

- Mainmast*: the second mast from the bow of a ship having two or more masts. If a ship has but one mast, it is considered the mainmast.
- Maintop*: the top of the mainmast.
- Marlinspike*: a pointed iron instrument used in splicing rope and wire.
- Mast*: the vertical spar supporting the signal yard; the daily ceremony of bringing delinquents in discipline before the Commanding Officer.
- Masthead*: the top of the mast.
- Meal pennant*: a red pennant hoisted from the port yardarm of a naval vessel at anchor when the crew is at mess. Popularly called "chow rag" or "bean rag."
- Mess*: to eat; a group of persons eating together.
- Messenger*: a light line made fast to a hawser for the purpose of heaving the latter in; the enlisted man who attends and runs errands for the officer of the deck.
- Messroom*: a space where members of the crew eat their meals.
- Monkey fist*: a complicated knot with or without weight enclosed, worked into the end of a heaving line.
- Nest*: a method of boat stowage in which one boat is placed inside another.
- Niggerheads*: bollards; sometimes applied to winch heads.
- Officer of the deck*: an officer taking his turn in charge of the ship. He acts as the Captain's representative and as such is senior to all officers except the Captain and the executive officer.
- On board*: aboard, anywhere on a ship.
- On soundings*: to be within the 100-fathom curve; to navigate by the use of soundings.
- Outboard*: toward the sides of the vessel in relation to the centerline; or outside the vessel entirely.
- Out of trim*: to carry a list or to be down by the head or stern.
- Painter*: the line in the bow of a small boat for towing or making fast.
- Paravanes*: sometimes referred to as "otter gear," torpedo-shaped devices which are towed on either side of a steamer's bow for the purpose of deflecting and cutting mines adrift.
- Part*: to break, as of a rope.
- Passageways*: corridors or hallways used to facilitate horizontal movement between compartments on board ship.
- Pass the word*: to repeat an order or information to the crew.
- Pay out*: to let out chain or ease off on a line.
- Pigstick*: a small spar projecting above the top of the mainmast from which the ship's commission pennant is flown.
- Pipe down*: an order to keep quiet or stop talking; an order dismissing the crew from an evolution (drill).
- Pipe the side*: the ceremony at the gangway in which side boys are formed and the boatswain's pipe blown when an official comes aboard or leaves a naval vessel.
- Pooped*: a term applied when the sea breaks over the stern of the vessel.
- Port*: the left side of a vessel looking forward; an opening in a ship's side; a harbor for embarkation and discharge of cargo.
- Quarter bill*: a list of all men and officers and their stations on board ship.
- Quarter-deck*: that part of the main or other appropriate deck set aside for the conduct of official and ceremonial functions. The Commanding Officer of the ship defines the limits of the quarter-deck.
- Quarters*: living compartments; assembly of the crew.
- Relieving (watch, etc.)*: to take over the duty.
- Ride*: to lie at anchor; the way a vessel takes the seas is the way she rides them.
- Rigging*: the ropes of a ship; particularly those securing masts, booms, etc.
- Rise and shine*: a rising call for all members of the crew to turn out of their bunks and hammocks. "Hit the deck" may also be used for the same purpose.
- Rocks and Shoals*: familiar term for *Articles for the Government of the Navy*.
- Rope*: generally speaking, refers to cordage whose circumference is greater than 1 inch. Made of twisted strands that are in turn made up of twisted yarns. Aboard ship, practically all the ropes used are called *lines*. Exceptions include man ropes and bell ropes. To say *wire rope* is correct usage.
- Rough log*: the rough pencil draft of the record kept on the bridge or in the chart house, of the movements of the vessel, activities carried out on board, or any pertinent items concerning ship or personnel.
- Sail ho*: the report of a lookout that a vessel has been sighted.
- Screw*: the propeller.
- Scuttlebutt*: a modern vessel's drinking fountain.
- Scuttlebutt story*: a rumor without authority.
- Sea bag*: a cylindrical canvas bag in which bluejackets stow their clothing and other gear.
- Sea chest*: bluejacket's trunk; the portion of an intake between the ship's side and the sea valve.
- Sea ladder*: a rope ladder for use over the ship's side at sea.

- Sea lawyer:* a seaman who is prone to argue against authority.
- Sea-panter:* a long line leading from the bow of a lifeboat to the ship and used to shear the lifeboat clear of the ship when the boat is water-borne.
- Second-deck:* the first complete deck below the main deck.
- Secure:* to make fast; safe; the completion of a drill or exercise on shipboard.
- Set the watch:* the order at 2000 on a naval vessel to station the first watch.
- Shakedown cruise:* a cruise of a newly-commissioned ship for the purpose of adjusting machinery and instruments and familiarizing the crew with the vessel.
- Shipshape:* in a neat and orderly manner, as is the custom aboard ship.
- Short stay:* when the ship has been brought up to the anchor so that the scope of chain is one slightly greater than the depth of the water.
- Show a leg:* an order to make haste.
- Sick bay:* the ship's hospital.
- Side boys:* the men manning the side in honor of some visiting officer or official.
- Side fender:* a longitudinal timber projecting beyond the outside of the hull planking, often metal-faced, to protect the hull.
- Signal bridge:* an open platform located near the navigating bridge from which signalmen maintain visual communication with other ships in the vicinity.
- Single up:* an order referring to the lines out at a pier securing a vessel; to single up is to reduce the number of parts out to one, preliminary to sailing.
- Small stores:* personal needs for seagoing men, such as articles of clothing.
- Smart:* snappy or seamanclike.
- Snub:* to check a chain or hawser suddenly.
- Speed cones:* conical shapes exhibited by naval vessels to indicate their engine speeds to those in formation astern.
- Splinter deck:* the protective deck having the lightest plating.
- Stanchions:* upright pillars either of wood or steel used to support various decks.
- Stand by:* an order to be prepared to execute an order or maneuver; a seaman who is subject to call if needed during a watch.
- Starboard:* the right side of a vessel looking forward.
- Station bill:* a bill which is posted in the crew's quarters or some conspicuous place listing the stations of the crew at maneuvers and emergency drills.
- Stem:* the apex of the bow, the upright timber in the forward part of a boat, joined to the keel by a knee; to stem a current or tide is to head into it and make way against it.
- Stern:* the back end of a vessel.
- Sternway:* when the vessel is moving backward.
- Stow:* to put gear in its proper place.
- Striker:* a nonrated man who is qualifying for a petty officer's rate.
- Superstructure:* includes all equipment and fittings other than armament extending above the hull.
- Tackle (tay-kle):* a purchase composed of blocks and lines.
- Tarpaulin:* a heavy, treated canvas used as a covering; also called *paulin*.
- Tend:* to man; the direction the cable leads when a ship is anchored.
- Third deck:* the second complete deck below the main deck.
- Thwarts:* athwartships seats in a small boat.
- Thwartships:* at right angles to the centerline; from side to side.
- Tompion (pronounced tom'pin):* a plug fitted in the muzzle of a gun to protect against weather.
- Train:* the supporting force of the Fleet which consists of the supply vessels, oilers, ammunition and repair ships, etc.; to aim a gun or searchlight horizontally.
- Trick:* a period of duty of the steersman at the steering wheel.
- Turn to:* an order to commence ship's work.
- Two blocked:* the condition when the two blocks of a tackle have been drawn together as close as possible by hauling on a fall.
- Unbend:* to cast adrift or untie; loosen.
- Under hock:* said of an officer who is confined as a result of a minor infraction of naval discipline.
- Underway:* a vessel is said to be underway when she is not at anchor, nor made fast to the shore or another ship, nor aground.
- Uniform of the day:* that uniform which is prescribed to be worn at a particular time.
- Unmoor:* to heave up one anchor leaving the other down; to cast off mooring lines.
- Up anchor:* an order given to heave up the anchor and get underway.
- Upper deck:* a partial deck above the main deck amidships.
- Vast:* an order to stop heaving.
- Veer:* to pay out chain or line; when the wind changes direction clockwise or to the right, it is said to veer.
- Waist:* the middle part of a vessel, or midships between bow and stern.
- Wardroom:* the officers' mess and lounge room.

Watch: a period of time on duty, usually four hours in length; said of an anchor buoy which is watching, or indicating the position of the anchor on the bottom.

Water breaker: a small cask used for holding drinking water, usually carried in ship's boats or rafts.

Weather deck: a deck having no overhead protection; the uppermost deck.

Weigh: to raise the anchor off the bottom.

Well: an order meaning sufficient.

Wheel: the steering wheel of the ship.

Where away: a question directed to a lookout reporting a light, sail, or other object; he is expected to answer, giving the bearing.

Wide berth: keeping at a comfortable distance from a ship, shoal, or shore.

Winch: a piece of machinery which operates a horizontal shaft, fitted with drums by which lines are hove in.

Windward: toward the wind.



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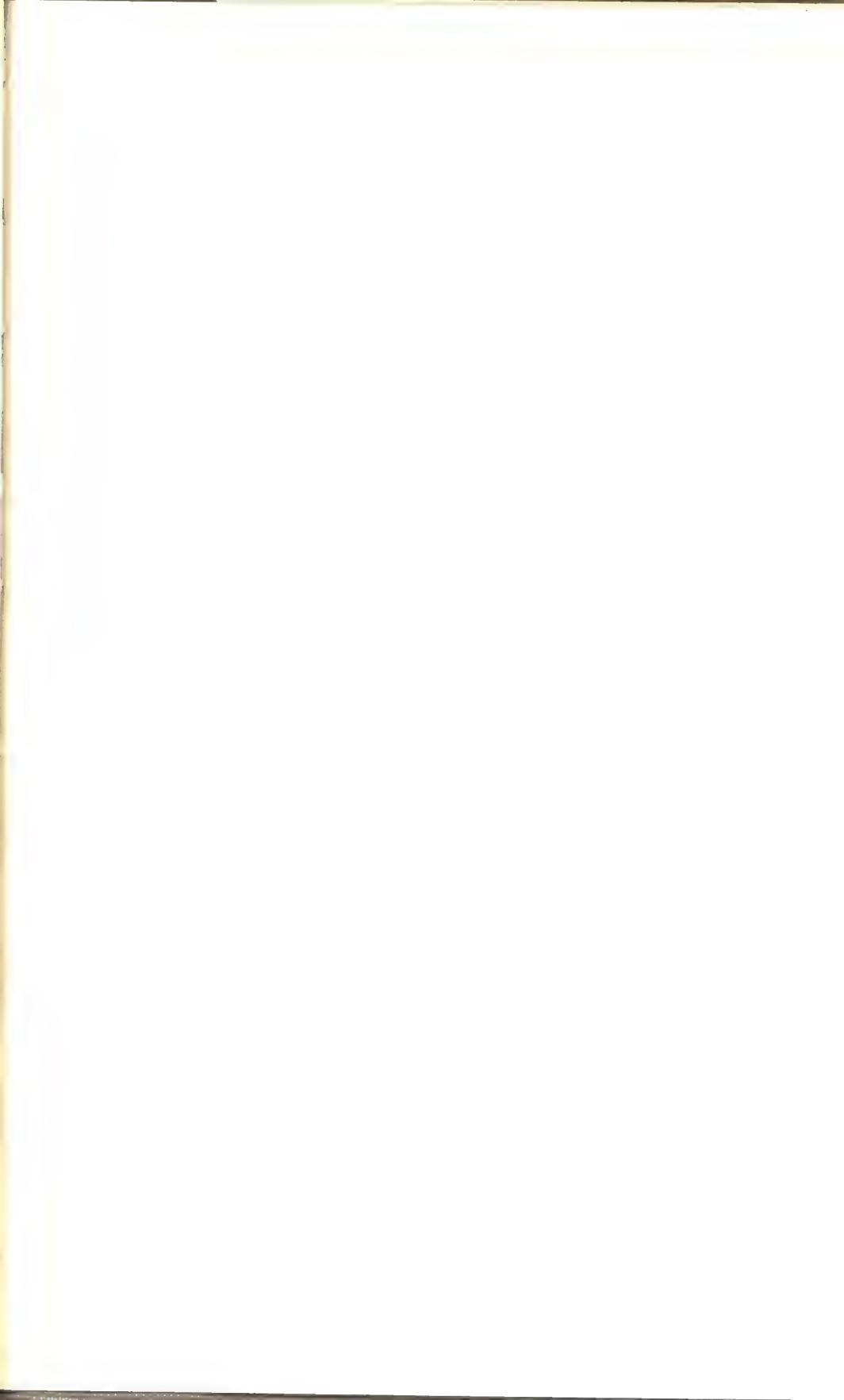
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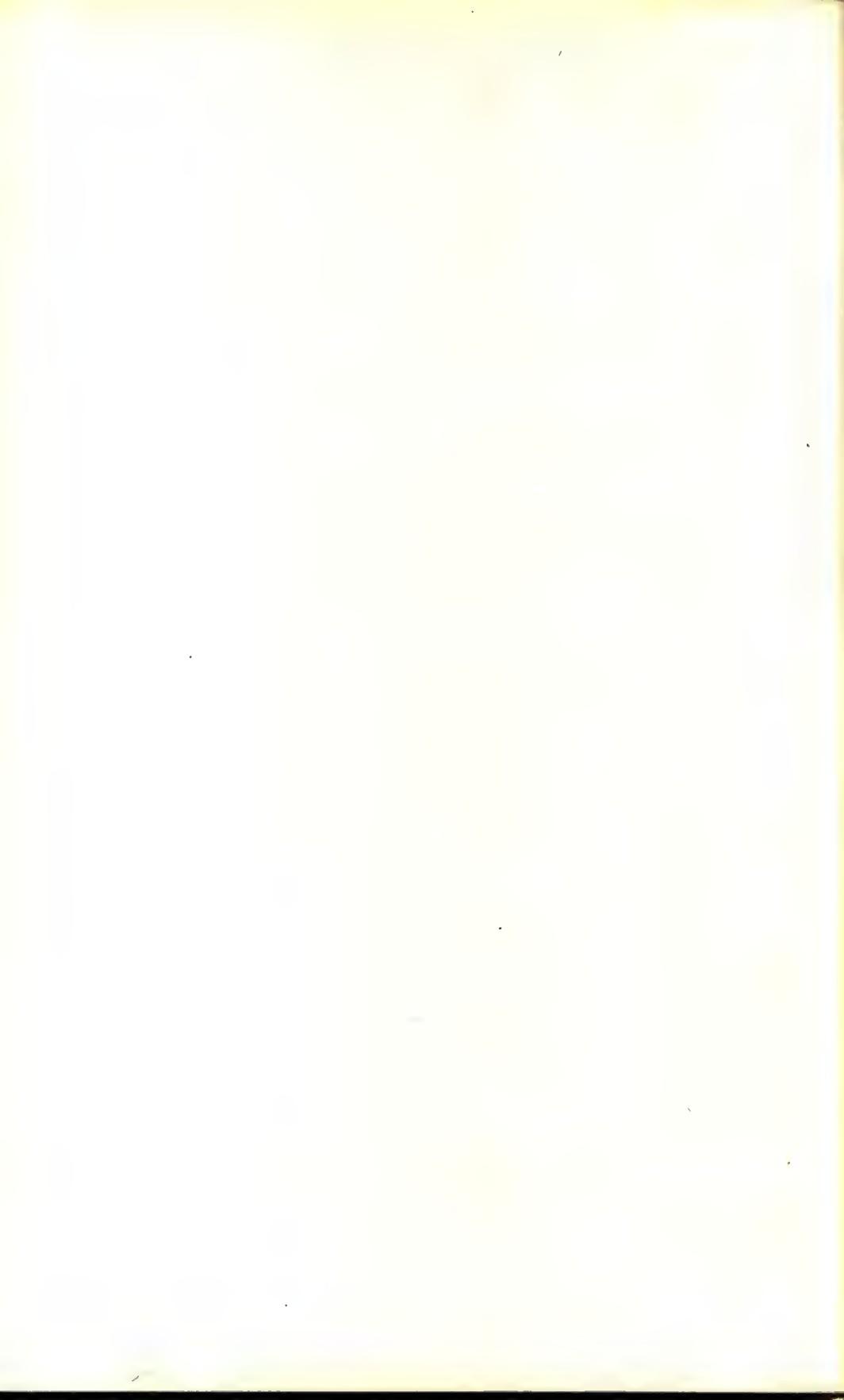














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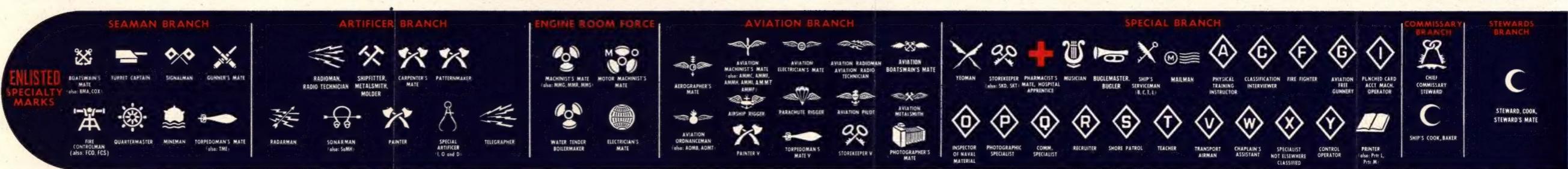
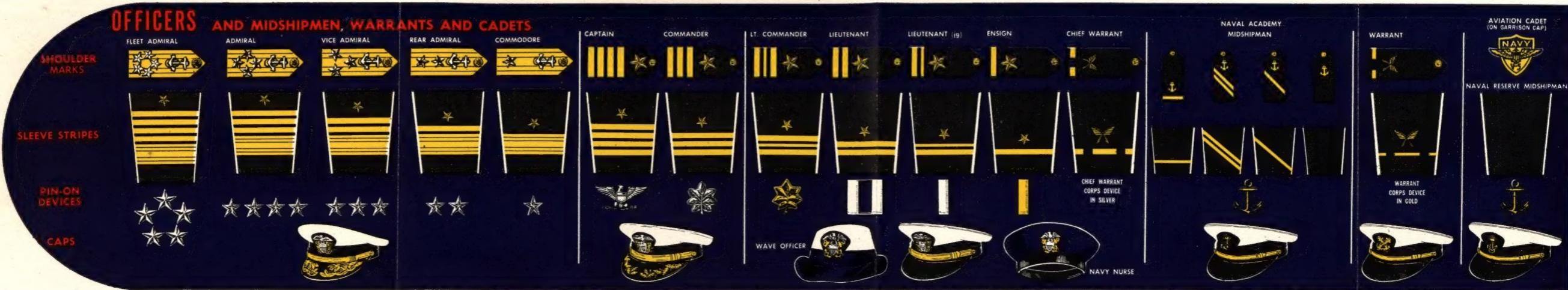
NAVPERS

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OFFICERS AND MIDSHIPMEN, WARRANTS AND CADETS



AWARDED TO NAVAL PERSONNEL

RIBBONS OF DECORATIONS AND MEDALS



MEDAL OF HONOR



MARINE CORPS
BREVET



NAVY CROSS



DISTINGUISHED
SERVICE MEDAL



LEGION OF MERIT¹



SILVER STAR
MEDAL



DISTINGUISHED
FLYING CROSS



NAVY AND MARINE
CORPS MEDAL



BRONZE STAR
MEDAL



AIR MEDAL



COMMENDATION
RIBBON



PURPLE HEART



SPECIALLY
MERITORIOUS MEDAL



PRESIDENTIAL
UNIT CITATION



AMERICAN TYPHUS
COMMISSION MEDAL



GOLD
LIFE SAVING MEDAL



SILVER
LIFE SAVING MEDAL



DEWEY MEDAL



SAMPSON MEDAL



NC-4 MEDAL



BYRD ANTARCTIC
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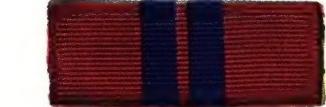
NICARAGUAN
CAMPAIGN MEDAL
(1912)



MEXICAN
SERVICE MEDAL



HAITIAN
CAMPAIGN MEDAL
(1915)



DOMINICAN
CAMPAIGN MEDAL



VICTORY MEDAL



HAITIAN
CAMPAIGN MEDAL
(1919-1920)



ARMY OF OCCUPATION
OF GERMANY MEDAL
(1918-1923)



SECOND NICARAGUAN
CAMPAIGN MEDAL



YANGTZE
SERVICE MEDAL



CHINA
SERVICE MEDAL



AMERICAN DEFENSE
SERVICE MEDAL



AMERICAN
AREA CAMPAIGN
MEDAL²



EUROPEAN-AFRICAN-
MIDDLE EASTERN AREA
CAMPAIGN MEDAL²



ASIATIC-PACIFIC
AREA CAMPAIGN
MEDAL²



NAVY
GOOD CONDUCT
MEDAL



MARINE CORPS
GOOD CONDUCT
MEDAL



COAST GUARD
GOOD CONDUCT
MEDAL



NAVAL RESERVE
MEDAL



MARINE CORPS
RESERVE MEDAL



NAVY
DISTINGUISHED MARKSMAN
DISTINGUISHED PISTOL SHOT



NAVY
EXPERT RIFLEMAN



NAVY
EXPERT PISTOL SHOT



GOLD STAR
WORN IN LIEU OF
SECOND AWARD OF
SAME DECORATION



BRONZE STAR
MEANING VARIES
ACCORDING TO REGULATIONS
FOR CERTAIN MEDALS.



BAILEY MEDAL



COAST GUARD
EXPERT RIFLEMAN



COAST GUARD
EXPERT PISTOL SHOT

¹ AWARDED TO UNITED STATES ARMED FORCES WITHOUT REFERENCE TO DEGREE; FOUR DEGREES AUTHORIZED FOR PERSONNEL OF FRIENDLY FOREIGN NATIONS.

²—WORN IN ORDER AS EARNED, BUT IN THEIR SENIORITY AS REGARDS OTHER MEDALS AND RIBBONS

STARS WORN ON RIBBONS

